# *Contractor Information Booklet (CIB) for Health, Safety & Environmental*

***Effective: 11/21/13***

***"I view safety in the workplace as being fundamental at Lilly. When we refer to one of our core values as Respect for People, what follows from that should be an expectation and a belief that no one should get hurt at work."***

***-John Lechleiter***
***Chairman and CEO, Eli Lilly and Company***

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# Foreword

Eli Lilly and Company strives to ensure all aspects of its operations are performed in a safe and environmentally responsible manner. The protection of the environment and the health and safety of its employees, contractors and visitors is a fundamental value that must be pursued vigorously.

Every person, working for or contracted by, Eli Lilly and Company is responsible for contributing to the provisions of a safe workplace. The responsibility for your own safety, the safety of others and the protection of property and the environment is shared by Eli Lilly and Company and you.

**By following Health, Safety, and Environmental (HSE) rules, you help make Eli Lilly and Company a safe place to work!**

The information and requirements in this booklet apply to all Eli Lilly and Company sites located in Indiana and is intended to assist Contract Firm Personnel in reducing events by emphasizing health, safety, and environmentally aware work practices. Additional Lilly specific requirements can be found in contract documents issued to your company. In the event of differences in referenced material such as: local site procedures, applicable local, state, or federal regulations and/or standards, the contract documents, or this booklet, the Contract Firm shall apply the more stringent.

**The Contract Firm *shall not assume* they are responsible for *only* the standards which are referenced in this manual. Check with your area representative to see if specific local procedures apply.**

Eli Lilly and Company *(hereafter referred to as "Lilly")* and Lilly's Contractor HSE Advisor does not assume liability due to this manual.

*This manual contains many sections containing segments of regulatory requirements. The reference sections are intended to assist Contract Firm personnel with an easily accessible awareness to federal regulations for convenience purposes only. Compliance with these reference sections in no way guarantees the fulfillment of the Contract Firm's obligations as may be required by local, state, or federal laws. These sections do not cover the full spectrum of health, safety, and environmental standards which are mandated by law. The Contract Firm shall not assume they are responsible for only these standards which are referenced in this booklet nor that such standards are current and quoted as published. The Contract Firm is responsible for compliance with all applicable local, state or federal laws and regulations. In the event of conflict between the section's content and applicable state/federal law or contract documents, Contract Firms shall apply the more stringent. Eli Lilly and Company or Safety Management Group by reason of this manual assumes no liability.*
*For Global Facilities Delivery projects, additional HSE requirements may be needed. Please refer to 015-50.*

***Regulatory references will be displayed throughout this document at the end of each applicable section, in these red boxes.***

# Emergency Information

## 1. Emergency Procedures

**A. Contract Firm Personnel are required to immediately contact Lilly Security (See pg. 7-9 for contact information) under the following circumstances:**

- **i.** In the event of a serious or life threatening injury/illness*.
- **ii.** If the event involves a Lilly compound or Lilly process.
- **iii.** In the event of electrical energy contact (shock) regardless of the severity.
- **iv.** Events involving chemical spills, releases (over a pint or a pound), or potential exposure to blood or other bodily fluid contaminations.
- **v.** Property damage events that impact the safety of people, the environment, production, or operations.

***In the event of a serious or life threatening event,** Security will contact the proper emergency personnel.

**B. Fire Event Procedures**

- **i.** In the event Contract Firm personnel suspects a fire, the following protocol shall be followed:
  - **1)** Immediately pull the nearest fire pull station, contact Security via telephone or Lilly radio, and evacuate the area.
  - **2)** You may attempt to extinguish the fire if <u>all</u> of the following conditions are met:

**a.** Security has been or is being notified via fire alarm pull station, radio or phone.
**b.** The fire is in the incipient (beginning) stage.
**c.** The appropriate fire extinguisher is available.
**d.** You have been trained and are comfortable with the use of the extinguishing equipment.
**e.** Fighting the fire will not jeopardize your ability to safely evacuate the area.

**3)** A fire extinguisher may be used as needed to achieve a safe evacuation from the area.
**4)** Remain at the scene (rally point, evacuation point) and review the event with emergency personnel conducting the investigation.

## C. Non-Emergency Event Reporting Procedures

**i.** Safety Events

**1)** For injuries/ illnesses not requiring emergency transportation, the injured Contract Firm Personnel shall be transported by the Contract Firm to the preferred medical care provider.
**2)** Contact the Local Contractor HSE Advisor to report any work-related injury/illness *(See Site Specific Emergency Information Table for more information on page 7)*
**3)** For treatment of after hour injury/illnesses, contact your Contractor HSE Advisor for site-specific requirements.
**4)** Contract Firm Supervision shall provide the Contractor HSE Advisor with an update as soon as the information is available with regard to the injured Contract Firm Personnel's condition and return to work status.

**ii.** Exposure to Lilly Compound

**1)** In the event of an actual, potential, or perceived exposure to chemicals/compounds, developed or manufactured by Lilly, immediately report to Security and transport the individual to Lilly Employee Health Services (EHS) during normal Lilly EHS hours. Security will advise for after hour exposures.
**2)** Individuals who have been exposed shall be decontaminated prior to transportation if necessary.

**iii.** Environmental Events

**1)** For environmental events, concerns, or observations, contact the Local Lilly Environmental Representative *(See Site-Specific Emergency Information Table)*

***All HSE events, whether minor or serious, shall be reported immediately to your Supervisor.***
***The Supervisor will immediately report all HSE events, whether minor or serious, to the Lilly Work Area Contact and the Contractor HSE Advisor. Additional Lilly specific requirements can be found in contract documents issued to your company.***

| Site Specific Emergency Information | | | |
|---|---|---|---|
| | **LCC** | **LTC** | **Clinton** |
| **Lilly Security** | Ext. 555 or<br>317-277-0016 | Ext. 555 or<br>317-277-0116 | Ext. 4201 or<br>765-832-4201 |

| | | | |
|---|---|---|---|
| **Contractor HSE Advisors** | **LRL Discovery**<br>Site: 317-651-3725<br><br>**Indy FM**<br>Site: 317-433-4733<br><br>**General & Administrative**<br>Site: 317-277-4521 | **API**<br>Site: 317-433-6454<br><br>**Parenteral**<br>Site: 317-277-8357<br><br>**Indy Dry**<br>Site: 317-277-6939<br><br>**Indy FM**<br>Site: 317-276-1313<br><br>**LRL Development**<br>Site: 317-433-3816 | Site: 765-832-4641 |
| | **Alternate Contact for ALL Sites**<br>SMG Account Manager: 317-276-3413<br>**GFD:** 317-433-8956 | | |
| **Medical Events** | **LCC** | **LTC** | **Clinton** |
| **For Medical Emergencies, call Lilly Security and give the following information:**<br>• Name<br>• Company Name<br>• Type of event/injury<br>• Location<br>• Status of injured<br><br>**Locations other than Clinton, Material Center, Corporate Center (LCC) and Technology Center (LTC) dial 911 for emergencies**<br><br>Note: Contact Contractor HSE Advisor and Work Area Contact immediately after contacting Security | Ext. 555 or<br>317-277-0016 | Ext. 555 or<br>317-277-0116 | Ext. 4201 or<br>765-832-4201 |
| **For First Aid Treatment:**<br>Note: All OCIP Contract Firm Personnel at Indianapolis sites are required to go to the Lilly Contractor Nurse. Clinton OCIP contractors are required to utilize 765-832-4255<br><br>Note: All Non-OCIP Contract Firm Personnel at Indianapolis sites are encouraged to use the Lilly Contractor Nurse.<br><br>Note: The contractor nurse can also provide first aid treatment for non-work related injuries or illnesses. Additional services such as fit testing, vision screening, Hepatitis B vaccines can also be provided by the nurse for a fee. | Lilly Contractor Nurse<br>LTC North- Building 328<br>Hours: M-F 7AM-5PM<br>Phone: 317-276-3832<br>Cell: 317-714-7851 | Lilly Contractor Nurse<br>LTC North- Building 328<br>Hours: M-F 7AM-5PM<br>Phone: 317-276-3832<br>Cell: 317-714-7851 | Center for Occupational Health<br>4001 Wabash Ave.<br>Terre Haute, IN |

| | | | |
|---|---|---|---|
| **<u>For Medical Treatment Beyond First Aid & All After-Hours Treatment, OCIP Contract Firms Must Utilize:</u>**<br><br>Note: All Non-OCIP Contract Firm Personnel should go to their company's designated occupational health care provider.<br><br>When Lilly ERT provides transport for injured personnel, transport will always be to Concentra Medical Health Centers regardless of whether they are OCIP or Non-OCIP. | Concentra Medical Health Centers (Southwest – 24 hour facility)<br>5940 Decatur Blvd.<br>Indianapolis, IN 46241<br><br>Or<br><br>Concentra Medical Health Centers (Northwest)<br>5604 West 74th St.<br>Indianapolis, IN 46278 | Concentra Medical Health Centers (Southwest – 24 hour facility)<br>5940 Decatur Blvd.<br>Indianapolis, IN 46241<br><br>Or<br><br>Concentra Medical Health Centers (Northwest)<br>5604 West 74th St.<br>Indianapolis, IN 46278 | Union Hospital<br>801 South Main Street<br>Clinton, IN |

| Environmental | LCC | LTC | Clinton |
|---|---|---|---|
| **Environmental Events**<br>*For chemical spills or releases (greater than 1 pint/1 pound), or discovery of unknown materials (e.g. drums without labels) call Security and give the following information:*<br>• Name<br>• Company Name<br>• Type of event<br>• Location<br><br>For routine disposal /environmental questions, contact your Local Lilly Environmental Representative and /or the Environmental Helpline<br><br>Note: Contact Contractor HSE Advisor, Work Area Contact and Local Lilly Environmental Representative immediately after contacting Security. | Call Security and request a HAZMAT run. | Call Security and request a HAZMAT run. | Contact Security, Lilly Work Area Contact, Contractor HSE Advisor, and Contract Firm Personnel's Supervisor. May activate nearest help alarm. |
| **Emergency Notification Procedures** | | | |
| **Emergency Notification Procedures**<br>*In case of emergencies requiring evacuation, Shelter-In-Place or severe weather notification:*<br><br>Note: Emergency announcements are made in English. Contract Firms must account for communication with people who may not understand English.<br><br>Contract Firm Supervision will be responsible for performing a head count, to be provided to the Lilly Work Area Contact upon request. ***In the event that Contract Firm Personnel are discovered to be missing during a fire or building evacuation head count, call the following number immediately:*** | Workers will be notified via the emergency announcement system or the project specific process.<br><br>RALLY (7-2559) from a Lilly phone or 277-2559 if calling from and outside line. | Workers will be notified via the emergency announcement system or the project specific process.<br><br>RALLY (7-2559) from a Lilly phone or 277-2559 if calling from an outside line. | Workers will be notified via activation of a tone generator alarm, followed by announcements over the PA system. Upon hearing the tone, workers shall move to an inside location to hear the announcement and any emergency instructions.<br><br>Ext. 4201 or 765-832-4201 |

# General Lilly Information

## 1. HSE EVENT INVESTIGATION & REPORTING

**A.** All HSE events, whether minor or serious, shall be reported immediately to your Supervisor.
**B.** The Supervisor will immediately report all HSE events, whether minor or serious, to the Lilly Work Area Contact and the Contractor HSE Advisor.
**C.** The following forms are required to be submitted by all Contract Firms to the local Contractor HSE Advisor *(Contact your Lilly Work Area Contact or your Contractor HSE Advisor for these forms)*:
  **i.** Preliminary Event Investigation Report
  **ii.** Event Statement
  **iii.** OCIP Contract Firms are also required to submit the following *(found in the OCIP Manual)*:
    **1)** Consent for Medical Release
    **2)** First Report of Injury (submit to Amerisure only)

## 2. GENERAL INFORMATION

### A. HSE Violation Consequences

Lilly has developed its HSE program to ensure those who support them can do so in a safe workplace and without concern that others will expose them or the environment to harm. As a result, Lilly will not tolerate violation of its policies and procedures.

There are generally three levels of violations. These are listed below from most to least severe:

**i.** Level 1- "Flagrant", "Intentional" or "Knowing Disregard" of compliance to Lilly regulations/requirements, property, and/or the well being of others will result in immediate and permanent dismissal from the project or work area and all Lilly property. Level 1 violations include, but are not limited to:
  **1)** Being under the influence of, possession of, or selling/dispensing alcohol or drugs while on Lilly's property. Being "under the influence" is defined as testing positive on a drug screen (Post Event or For Cause) or having a Blood Alcohol Content exceeding acceptable limits as measured by breathalyzer (Post Event of For Cause).
  **2)** Disregard for Lilly's Safety, Good Manufacturing Practices *(G.M.P.)*, and Environmental or Security regulations.
  **3)** Use of ANY tobacco products *(including smokeless tobacco)*, or use of matches/lighters in unapproved locations on Lilly's property.
  **4)** Physical assault or fighting on Lilly's property *(Self-defense will be carefully evaluated).*
  **5)** Violation of others' rights by threat, intimidation, discrimination, or harassment *(sexual, religious, racial, etc.)*.
  **6)** Retaliation against an individual who reported, in good faith, a suspected infraction.
  **7)** Attempted, threatened, or intentional defacing/damaging/sabotage of Lilly's or other's property.
  **8)** Unauthorized possession of firearms, weapons, ammunition, or explosives on Lilly's property.
  **9)** Intentionally entering areas of Lilly's property, outside of designated work area, without sufficient reason.

**10)** Falsification of reports, dishonesty, or the unauthorized removal of Lilly's property.
**11)** Insubordination, including willful negligence or refusal to comply with Lilly's communicated requirements.

**ii.** Level 2 – "Irresponsible or Defiant Action" with the potential of serious consequences will result in immediate dismissal from the project or work area and suspension of access to Lilly property for a defined period. *(Multiple offenses may result in permanently barred access to all Lilly property.)* Level 2 violations include, but are not limited to:

**1)** Operating Contract Firm tools/equipment without proper authorization, training or licensing (7-14 calendar day suspension).
**2)** Completing environmental tasks without proper authorization, training or licensing *(7-14 calendar day suspension)*.
**3)** Operating Lilly's systems, tools, or equipment without proper authorization *(30-180 calendar day suspension)*.
**4)** Failure to comply with the Lilly's Contractor Access Requirements *(90-calendar day suspension)*.
**5)** Failure to comply with Lilly's Fall Protection, LOTO, Confined Space Entry, Fire Hazard or Trenching/Excavation requirements *(30 -180 calendar day suspension)*.
**6)** Authorizing or participating in a known safety violation *(30-180 calendar day suspension)*.
**7)** Acts that demonstrate a disregard for the safety of yourself or others *(30-180 calendar day suspension)*.
**8)** A non-flagrant failure to comply with Lilly's Safety, G.M.P., Environmental or Security regulations *(30-180 calendar day suspension).*
**9)** Failure to report work related near misses, property damage, environmental spills/releases, or injuries to Lilly or the Contractor HSE Advisor *(30-180 calendar day suspension)*.

**iii.** Level 3 - A negligent act that does not immediately present the potential for serious consequences will result in:

**1)** First Offense = First Verbal Warning.
**2)** Second Offense = Second Written Warning.
**3)** Third Offense = Dismissal from project or work area and suspension of access to Lilly property for 30-calendar days.
**4)** Additional offenses within one year of expiration of a suspension will result in the doubling of the previous suspension period.
**5)** Level 3 violations include, but are not limited to:
**a.** Eating or drinking in unapproved locations on the Lilly's property.
**b.** Failure to wear required Personal Protective Equipment *(PPE)*.
**c.** Working without appropriate safety permits.
**d.** Abuse or neglect of Lilly's property or equipment.

**iv.** Supervisors may be disciplined for failing to detect a violation by individuals under their responsibility if the failure is shown to be a result of inadequate supervision of personnel.

## 3. Harassment

A. On-the-job harassment of any individual because of the individual's race, sex, religion, age, national origin, citizenship, veteran status or disability is strictly prohibited. This prohibition includes sexual harassment. If someone believes he or she is the victim of harassment, this should be reported promptly to the person's Contract Firm supervision and your Lilly

representative *(e.g., Responsible Host, Work Area Contact, or Sponsor)*. Reports can also be made via the Ethics and Compliance Hotline by calling 1-800-815-2481.

## 4. Site Access

Lilly reserves the right to control access to its property. This access control is a means to manage the risk associated with those who have demonstrated that they pose a risk to themselves, others or the environment. Lilly assumes no responsibility relative to the employment of any Non-Lilly Personnel who are refused unescorted access to our property.

### A. Badges, Entrances, and Parking

**i.** Contract Firm Personnel badges are issued in order to provide individuals unescorted access on Lilly property. To qualify for a badge, the following Lilly requirements MUST be met:

**1)** Compliance with the Substance Abuse Program.
**2)** Criminal Background Check Program.
**3)** Contract Firm is HSE Qualified
**4)** Successful completion of Lilly's Contract Firm Personnel HSE Orientation. (Contract Firm Personnel absent from the site for more than one year will be expected to attend orientation PRIOR to returning to the job). The following Orientation Modules must be completed annually:
**a.** Hot Work
**b.** Process Safety Management

### ii. Entrances

**1)** The security identification badge issued to Contract Firm Personnel must be used each time they enter or leave the plant site and shall be maintained on the person at all times while on the plant site.
**2)** If the card reader is not in operation or not being utilized, the Contract Firm Personnel will use the established security sign-in system to document entry and exit from the plant site.
**3)** Unauthorized use of another individual's badge to access the plant site is strictly prohibited.
**4)** Walking to a work area/project is permitted using designated walkways only. Shortcuts through production buildings or straying from designated walkways are not permitted.
**5)** Additional entry/exit practices may be required at specific buildings on-site. These may include sign-in sheets in production buildings or other hazardous locations on site. Check with your Lilly Work Area Contact for specific requirements.

### iii. Driving and Parking

**1)** Contract Firm Personnel parking is designated at all sites.
**2)** Only Contract Firm Personnel with prior authorization shall be allowed to drive/park on the plant site. Persons who are granted parking passes into the plant sites shall only park in non-reserved parking areas.
**3)** If you are parking within the plant site but not in a designated parking area, keys shall be left in the ignition of the vehicle in the event the vehicle needs to be moved for an emergency.
**4)** All posted speed limits, traffic signs and signals must be observed while on Lilly property.

5) Contract Firm Personnel who drive on Lilly property must have a valid driver's license.
6) Driving any vehicle or motorized equipment *(including golf carts, etc.)* in an unsafe manner will not be tolerated.
7) If the vehicle is equipped with seat belts, they must be worn while the vehicle is in motion.
8) Transportation of personnel in the back of a pickup truck is not allowed unless the truck has been equipped with bench seats permanently attached to the bed.
9) Contact your Lilly Work Area Contact for site-specific requirements.
10) Drivers are prohibited from the following activities while operating a vehicle/equipment: making or receiving phone calls, texting or emailing, using laptops, mobile computers, electronic games or handheld readers, using any type of headphone that compromises the driver's ability to hear traffic. Drivers must discontinue the use of any mobile electronic device under conditions which merit increased focus such as construction zones, severe weather, heavy traffic, etc. unless the operation of that equipment requires the use of those devices *(e.g., use of a radio by a spotter on a crane lift).*

### iv. Working Hours

1) Contract Firm Personnel working outside normal working hours will need to arrange with the Lilly Work Area Contact for access to the plant site.

### v. Use of Lilly's Facilities

1) Contract Firm Personnel shall not enter Lilly buildings without direction from Contract Firm Supervision or their Lilly Work Area Contact.
2) Consult your Lilly Work Area Contact for permission prior to use of company lounges, passenger elevators, cafeterias and toilet facilities.
3) Contract Firm Personnel are responsible for following all safety and operating regulations for those areas. Lilly does have areas that are hazardous; therefore the Contract Firm Personnel MUST work with the Lilly Work Area Contact to review any special requirements for accessing such areas.
4) To reduce the risk of injury, handrails should be used at all times when ascending or descending stairs**.**

### vi. Security Inspections

1) Lilly Security maintains the right to inspect any person or vehicle while on a Lilly site.

### vii. Contract Personnel Site Access Termination

1) Site Security shall be contacted and given the individual's name at the time of termination.
2) The individual shall be escorted to an exit point of the secure perimeter by the appropriate Contract Firm's Personnel.
3) The Contract Firm security badge, parking identification tag, yard pass, keys, Lilly issued radios, computers or any other Lilly issued equipment must be collected at the time of termination and turned in to Security or the appropriate Lilly contact. Failure to return any of these items will result in a monetary charge to the Contract Firm, or may result in future prohibition of work at Lilly sites.

## 5. Construction and Material Passes

**A.** If a Contract Firm is to move equipment or materials off-site, the Lilly Work Area Contact must sign a Lilly Property Pass (secured from Security) for the Contract Firm.

**B.** A Contract Firm Personnel's personal property pass must be used to remove personal equipment owned by the worker from the site. Toolboxes, clothing, and miscellaneous parcels must be documented on the pass and it must be signed by Contract Firm Supervision.

## 6. Cameras and Communication Devices

**A.** No camera use is allowed on Lilly sites without written authorization from Lilly. Written authorization *(in the form of a pass)* must be obtained from Security. Cell phones with cameras are allowed (some areas exclude cell phones completely) without authorization, but if the camera is to be used there must be a camera pass in place.

**B.** All photos taken on-site will be the sole property of Lilly and cannot be removed from the site without authorization from a Lilly Representative.

**C.** Electrical equipment including two-way radios, pagers, mobile phones, etc. is allowed on site if approval is received from the Lilly Work Area Contact. ***(There are areas where these items are prohibited. Please work with your Lilly Work Area Contact before accessing any new areas)***. Electrical equipment shall be intrinsically safe and properly rated if used in hazardous areas.

**D.** The use of personal audio equipment with headsets *(e.g. radios, CD players, mp3 players, etc.)* is prohibited in construction or Contract Firm work areas.

**E.** The use of mobile phones and radios while driving a vehicle or operating equipment, unless the operation of that equipment requires the use of those devices *(e.g., use of a radio by a spotter on a crane lift)* on Lilly property is prohibited.

**F.** No unrated electrical device is allowed in electrically classified areas ( e.g., cell phones, portable electronic devices, etc.)

## 7. Tobacco, Matches, Lighters and Sharps Policy

**A.** The use of ANY tobacco products *(including smokeless tobacco and electronic cigarettes)* is prohibited anywhere on Lilly's property; however, site-specific designated areas may apply. Contact your Lilly Work Area Contact or Contractor HSE Advisor for additional instructions (Level 1 violation).

**B.** The use of tobacco products is prohibited in any vehicle on Lilly property.

**C.** Never carry or use the common kitchen match, liquefied petroleum gas lighter *(disposable butane lighter)* or lighter not equipped with a cover.

**D.** Lighters and matches shall be stored in a personal locker/vehicle away from any process areas or areas containing flammable materials.

**E.** Sharps (needles, syringes, etc.) are NEVER to be disposed of in the general trash. Contract Firm Employees may obtain a personal sharps container through Lilly Employee Health Services and return for disposal when full in exchange for an empty. As an alternative, sharps containers for general use are provided in many site restrooms.

## 8. Weapons

**A.** The possession of weapons on Lilly sites and designated parking areas is prohibited and is grounds for revocation of site access.

## 9. Substance Abuse Policy

**A.** The unauthorized use, possession, sale, dispensing or manufacturing of drugs or alcohol is prohibited on Lilly property.

**B.** Contract Firm Personnel fully participating in the program shall have a negative substance abuse screen test result no less than annually.

**C**. Alcohol and substance abuse testing results shall be documented. Contract Firm Personnel fully participating in the program shall have a valid Metro Indianapolis Coalition for Construction Safety *(MICCS)* substance abuse card or equivalent if the Contract Firm is not a MICCS participant. Contract Firm Personnel shall carry their card with them at all times.

**D**. Lilly's Substance Abuse Program, to which all fully participating Contract Firm Personnel will be subjected, includes:

- **i.** Pre-Employment - Prior to being granted unescorted access to Lilly property.
- **ii.** Annual and Random (periodic)
- **iii.** Test for Probable Cause
- **iv.** Post Event *(applies to work related injuries requiring off-site medical treatment, property damage that could exceed $5, 000 (*or *as determined by Business Area),* events resulting in the disruption of Lilly's operations, a significant near miss that has the potential for significant loss *or if* requested *by Lilly*.

**E.** Lilly's Substance Abuse Program, to which Contract Firm Personnel not fully participating in the program will be subjected, includes:

- **i.** Pre Employment - Prior to being granted unescorted access to Lilly property.
- **ii.** Test for Probable Cause

**F.** Contract Firm Personnel who test positive will be immediately removed from Lilly property. The Contract Firm Supervision and Lilly Security shall escort these individuals to the gate.

***NOTE:*** Contract Firm Personnel who test positive on ANY screening will NOT be allowed to drive themselves to their destination.

**G.** Contract Firm Personnel who test positive *(annual or random)* must meet the following conditions, to include but not limited to:

- **i.** Individual must remain off Lilly property for at least 14 days.
- **ii.** Individual must consult with a licensed Substance Abuse Professional *(SAP)*.
- **iii.** Individual must provide a negative substance abuse test result.

**H**. Contract Firm Personnel who test positive *(annual or random)* two times within a 12-month period for substance abuse or alcohol will be ineligible to work on Lilly's property for one year. To be eligible for return to work after the one-year period, the following criteria must be met, to include but not limited to:

- **i.** Individual must consult a licensed Substance Abuse Professional *(SAP).*
- **ii.** Individual must provide a return to work negative substance abuse test result.

**iii.** Individual will be required to submit a minimum of two negative random follow-up tests within the next 12-month period after the return to work test.

**I.** Contract Firm Personnel who test positive *(post-event or for probable cause)* will be ineligible to work on Lilly's property permanently. *(See Section 2, General Information, A, HSE Violation Consequences, I – "Level 1").*

**J.** Laboratory tests that identify a diluted specimen will be considered invalid and failure to provide a new specimen, by noon of the following day, will be considered the same as a positive test. A second diluted specimen, without medical reason, will result in the same consequences as a positive test.

**K.** Random Blood Alcohol Content Testing may also be performed in conjunction with random testing on Lilly sites. The cutoffs and significance for breath alcohol levels have been defined in the MICCS Substance Abuse Program.

## Work-Specific Information

**1. Asbestos Policy**

**A.** Before beginning any activity that requires demolition and/or renovation to an existing Lilly facility, the Site Asbestos Coordinator *(SAC)* or your Contract HSE Advisor, shall be contacted to coordinate an inspection of the area.

**B.** Contract Firms performing work described in this section must first submit a written HSE work plan to the Lilly Work Area Contact and the Contractor HSE Advisor. This plan shall include all information required by the OSHA standard as well as any other applicable federal, state, and local requirements.

**C.** Contract Firm Personnel shall have knowledge of the process to notify the Lilly Work Area Contact and Lilly SAC pursuant to OSHA Requirements.

**D.** If any materials will be disturbed in areas that could contain asbestos during the course of work (*through activities including but not limited to drilling, cutting, grinding, sanding, abrading or abatement)*, Contract Firm Supervision shall inform their Lilly Work Area Contact, who will inform the Lilly SAC. The Lilly SAC will contact the appropriate personnel for testing and removal.

**E.** Construction personnel, maintenance personnel, cleaning personnel and all other Contract Firm Personnel who could potentially disturb asbestos containing materials in the course of their activities shall have knowledge of the types of materials which may contain asbestos**.**

**i.** Materials which may contain asbestos *(ACM)* include, but are not limited to, lab tops, building siding, gaskets, floor tile, pipe insulation, fume hood linings, flexible ductwork connections, ceiling tiles, floor tile adhesives, fireproofing, roof mastics and roofing materials. Lead and asbestos could be present in roofing materials and must be managed properly.

**ii.** Construction and Maintenance personnel must have annual 2 hour asbestos awareness training per 29 CFR 1926.1101(k) (9) (vi) and the Lilly Asbestos Policy.

**iii.** Janitorial and housekeeping personnel working in areas where ACM may be present shall have asbestos awareness training annually.

**F.** Contract Firm Personnel training documentation shall be available upon request.

**G.** Immediately cease work and notify the Lilly SAC and the Local Lilly Environmental Representative if visible emissions are observed during asbestos removal or handling. Implement corrective actions to prevent additional releases. Do not resume work until authorized by the Lilly SAC.

**H.** Only Contract Firm Personnel trained and licensed in removal of asbestos per OSHA, EPA, and all other applicable Federal, State, and Local requirements shall be allowed to perform asbestos abatement work. All asbestos materials shall be discarded according to Federal, State and Local requirements and only use a Lilly approved landfill.

## 2. Allergen Management

**A.** The Contract Firm shall verify the buildings to be demolished/renovated have been properly characterized and decontaminated in accordance with Lilly's Allergy Awareness and Prevention Document. Contact the Lilly Responsible Host for allergen /chemical decontamination information.

## 3. Barricades

**A.** Barricades must be utilized to warn against potential hazards in the area or restrict access. Caution or Danger tape may be used to warn or restrict pedestrian traffic on a job site.

- **i.** Yellow Caution tape is used to warn against a potential hazard.
- **ii.** Red Danger tape is used to restrict access to a designated area when an immediate danger is present. Under no circumstances shall Danger Tape be crossed without permission from the person controlling the area. A sign must be placed on Danger Tape identifying the hazard, date tape was installed, contact person and phone number.
- **iii.** Prior to installing Red/Danger tape that may block access or interfere with business operations, area management must be contacted to coordinate the placement of the tape.

**B.** Barricades must be placed at a height between 3-4 feet above walking surface.

**C.** If emergency equipment (eye wash, fire extinguisher) is within a barricaded area, access or alternative equipments must be provided so emergency equipment is available.

**D.** When a barricade is needed but the nature of the hazard is not readily visible, barricades must have signs or tags posted around the perimeter to identify the nature of the hazard.

**E.** For site-specific requirements, contact your Lilly Work Area Contact or Contractor HSE Advisor.

**F.** Prior to installing Red/Danger tape or other barricades that may block access or interfere with business operations, area management must be contacted to coordinate the placement of the tape. The HSE consultant can provide a copy of the barricade procedure upon request.

## 4. Bloodborne Pathogens

**A.** Contract Firm Personnel shall contact Security, Contract Firm Supervision, and the Contractor HSE Advisor whenever bodily fluids *(e.g., blood, human excrement, vomit, etc.)* are encountered on the job site to eliminate exposure to potentially infectious materials such as Hepatitis B *(HBV)* or Human Immunodeficiency Virus *(HIV)*.

**B.** Lilly's Emergency Response Team *(ERT)* or Contract Firm Personnel who have been properly trained in Bloodborne Pathogens, shall provide proper clean up for bodily fluids.

**5. <u>Breathing Air</u>**

**A.** All Contract Firm Personnel shall obtain approval from the Lilly Work Area Contact to use Lilly breathing air system(s). Additionally, all Contract Firm Personnel shall have documented training.

**B.** Lilly regulator valves are not to be adjusted without prior approval from departmental personnel.

**C.** In the event of an oxygen deficiency, or when high levels of carbon monoxide are detected in the breathing air system, an alarm will sound, or an emergency announcement will be made. The Contract Firm Personnel must discontinue use immediately until the problem can be repaired or an alternative Grade D breathing air source can be found.

**D.** Breathing air stations shall not be used for operations other than supplying breathing air.

**6. <u>Chemical Hazard Communication (HAZ-COM) / Global Harmonization</u>**

**A.** The Globally Harmonized System includes criteria for the classification of health, physical and environmental hazards, as well as specifying what information should be included on labels of hazardous chemicals as well as Safety Data Sheets. For additional information see OSHA section below.

**B.** Lilly *Safety Data Sheet (SDS)* formerly known as Material Safety Data Sheet *(MSDS)* is available to Contract Firm Personnel upon request from your Lilly Work Area Contact.

**C.** Contract Firms shall have an SDS/MSDS immediately available on-site for all hazardous chemicals utilized on Lilly property, as required by OSHA.

**D.** Lilly provided SDS/MSDS's are intended for on-site use only and shall not be removed from the site.

**E.** All containers (including secondary) must be labeled with the contents and hazardous information, in good condition, and remain closed when not in use.

- **Modification of the Hazard Communication Standard (HCS) to align with the Globally Harmonized System (GHS)**: OSHA has modified the current Hazard Communication Standard (HCS) to align with the provisions of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The HCS requires that chemical manufacturers and importers evaluate the chemicals they produce or import and provide hazard information to downstream employers and workers by putting labels on containers and preparing safety data sheets. Under the current HCS all employers must have a hazard communication program for exposed workers, including container labels, safety data sheets, and training.

**Major changes include**:

- Hazard classification
- Labels (requirements)
- MSDS/SDS
- Information and training.

**Chemical users:** Continue to update safety data sheets when new ones become available, provide training on the new label elements and update hazard communication programs if new hazards are identified.

**Effective Completion Dates:**

- December 1, 2013- Train employees on the new label elements and SDS format. Lilly impact: training records may be audited to ensure proper training is in place
- June 1, 2015- Comply with all modified provisions of this final rule, except: Distributors may ship products labeled by manufacturers under the old system until December 1, 2015. Lilly impact: labels and MSDS/SDS that come to Lilly must be updated to new system.
- June 1, 2016- Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards. Lilly impact: hazard communication program and training will be looked at as a part of the qualification of contractors.

For more information see OSHA 1910.1200

## 7. Chemical Hygiene Plan (Lab Safety)

**A.** Lilly has written procedures addressing safety requirements, chemical hazard data, Particularly Hazardous Materials *(PHM's)*, and other hazards associated with work performed in laboratories.

**B.** All Contract Firm Personnel who work in labs shall be trained in the applicable provisions of the Lilly Chemical Hygiene Plan, as determined by the site. Contact your Lilly Work Area Contact for additional information.

## 8. Compressed Gas Cylinders

**A.** Compressed gas cylinders shall be stored in areas approved by the Lilly Work Area Contact and secured at all times.

**B.** Cylinders shall be kept away from radiators and other sources of heat. Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location at least 20 feet from combustible materials.

**C.** Cylinders should be stored away from areas where they may be knocked over or damaged by passing or falling objects or subject to tampering. They should be upright and secured with a chain or a cable to a stationary support or to a proper cylinder cart to prevent them from tipping or falling.

**D.** Store oxygen cylinders 20 feet away from fuel-gas cylinders, such as acetylene or separate them with a non-combustible barrier at least 5 feet high.

**E.** Waste cylinders shall be returned to the supplier for refilling when feasible or discarded in accordance with local policy or procedure.

**F.** All waste cylinders intended for discard must be empty, vented, and either devalved, hole drilled in sidewall or cut in half. Cylinders meeting these conditions should be sent to the scrap metal dumpster for recycling. Contact your Lilly Work Area Contact for further assistance.

*Inside of buildings, oxygen-fuel gas welding cylinders must be stored in a well-protected, well-ventilated, dry location, at least 20 feet (6.1 meters) from highly combustible materials such as oil or excelsior. Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways. Assigned storage spaces must be located where cylinders will not be knocked over or damaged by passing or falling objects, or subject to tampering by unauthorized persons. Cylinders must not be kept in unventilated enclosures such as lockers and cupboards* ***(§1910.253(b)(2)(ii))****.*
*Where such a cylinder is designed to accept a valve protection cap, caps must be in place, hand-tight, except when the cylinder is in use or is connected for use* ***(§1910.253(b)(2)(iv))****.*

## 9. Confined Space

**A.** Confined Space Equipment Requirements

**i.** The following equipment may be required when performing confined space entry operations at a Lilly facility:

**1)** Full body harness *(must have a non-conductive D-ring if used in an electrical man hole)*

2) Attendant atmospheric testing monitor, capable of at least measuring oxygen, carbon monoxide and lower explosive limit % *(LEL)* ***and any other potentially toxic atmospheric conditions in the space.***
3) Personal atmospheric monitors for entrants that measure at least oxygen, carbon monoxide and lower explosive limit % *(LEL)* ***and any other potentially toxic atmospheric conditions in the space.***
4) Lilly Confined Space Entry Permit (*Contract Firms may use their own permit in addition to the Lilly permit if they so desire)*
5) Ventilation equipment
6) Appropriate PPE based on job safety review *(e.g., gloves, respirator, etc)*.

ii. When required for Confined Space Entry, it is the responsibility of the Contract Firm to provide the following equipment:
1) Personnel atmospheric monitors
2) Attendant
3) 10-minute escape air pack
4) Full body harness
5) Mechanical retrieval device
6) Fall protection other than retrieval device

**B.** Confined Space Training Requirements
i. All Contract Firm Personnel who perform confined space entry operations at a Lilly facility are required to be trained in all applicable OSHA Confined Space Entry standards.
ii. The Contract Firm shall provide written documentation of this training before any person enters a confined space or serves as an Attendant at Lilly.
iii. The Lilly Work Area Contact shall inform the Contract Firm of the Lilly Confined Space Entry procedure and permit requirements.

**C.** Confined Space Entry Procedures/Permit
i. Many areas of Lilly are considered confined spaces. These include but are not limited to: elevator shafts & pits, tanks, stills, reactors, boilers, pits, silos, ventilation and exhaust ducts, some false ceilings, sewers, degreasers, vats, manholes, electrical vaults, pipelines, spaces between walls and ditches.
ii. All confined space entry operations of Lilly owned spaces involving Contract Firms must be coordinated by the Lilly Entry Supervisor or a Designated Representative (that has completed Lilly CSE training). Coordination of entry activities shall be sufficient to ensure that the hazards present in the space and the hazards that could be generated by the work activities in the space and adjacent to the space are clearly understood by all parties.
iii. When both Lilly Personnel and Contract Firms are entering the same space, the use of Lilly permit/procedures will be required.
iv. When multiple trades or Contract Firms are involved in the same entry, a consistent set of permit/procedures meeting minimum OSHA requirements must be agreed upon and adhered to. At a minimum the Lilly CSE permit/procedure shall be used

**v.** For Permit Required and New Construction Confined Space, Lilly Emergency Response Team and Lilly Security shall be contacted prior to the initiation of work

**vi.** Check with Lilly Work Area Contact for confined space entry rules specific to that business unit.

**D.** New Construction Confined Space

**i.** On new construction, when it is determined that there is no potential of Lilly's operations creating an additional hazard or space has not been turned over to Lilly, Contract Firms may choose to use their own procedures/permit in order to conform with Lilly SOP's. Contract Firms using their own procedures/permit must consult their Lilly Work Area Contact or GFD Construction Coordinator for approval before entry. NOTE: Clinton Site does not allow for contractors to monitor any confined space on their own. All entries are controlled by the ELANCO Entry Supervisor.

**E.** Permit Required Confined Space Entry Procedures

**i.** .A Lilly Confined Space Entry Permit shall be issued by an authorized Lilly Representative for Contract Firm Personnel performing confined space work, when there is the potential of Lilly's operations creating a hazard. Lilly Personnel or representative (e.g. JCI) shall fill out and issue the permit at the time of entry, with the Contract Firm entrant(s) and attendant reviewing and signing before entry.

**ii.** Lilly Personnel or representative (e.g. JCI) are required to perform initial monitoring prior to entry in addition to the initial monitoring performed by the Contract Firm. NOTE: At the Clinton Site contractors must use only ELANCO air monitors unless they have a specific company policy. If contactor owned monitors are used, ELANCO monitors must be used in conjunction.

**iii.** The monitoring must include a check for oxygen level, carbon monoxide, hydrogen sulfide, and lower explosion limit % *(LEL)*, and any other atmospheric hazards/toxins that may be reasonably expected. The space must be monitored, and all readings documented, after all breaks, lunches and at least every 3 hours while work is ongoing or more frequently as specified by the Entry Supervisor.

**iv.** Contract Firms may be required to perform initial, periodic or continuous monitoring. Personal monitors may be required for all persons entering the confined space. Check with Contractor HSE Advisor or the Lilly Work Area Contact for site-specific requirements.

**v.** If the monitoring results are within acceptable limits, the authorized Lilly Personnel or representative (e.g. JCI) will sign the permit and post it at the entry to the space.

**vi.** While the space is occupied, an attendant must be stationed outside the space at all times. Some of the attendant's main responsibilities include:

**1)** Stay in constant communication with the entrants using visual, radio or other means.

**2)** Order immediate evacuation for any change in conditions which could reasonably impact the safety of the entrants and report the change to the authorized Lilly Representative.

**3)** Summon emergency response teams as conditions warrant.

**4)** Trained and capable of operating the mechanical retrieval device.

**vii.** At the completion of the day, the permit must be closed out and returned to the authorized Lilly Personnel or representative (e.g. JCI).

**F.** Non- Permit Required Confined Space Entry Procedure

**i.** "Non-permit confined space" means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm. It is required to conduct initial air monitoring prior to breaking the plane of the confined space.

**ii.** If no potential hazards exist, proceed with work. If hazards are present or created by the work being done, a reevaluation of the hazards in the space is required and the space will be temporarily re-classified as a permit required confined space.

**iii.** False ceilings in administrative buildings are considered non-permit confined spaces. False ceilings in buildings containing labs, production areas, or shop areas are considered permit required confined spaces.

## 10. Cranes

**A.** Please contact your Lilly Work Area Contact or local Contractor HSE Advisor for site requirements.

**B.** A written lift plan is required to be completed and signed by a qualified person, when any of these conditions are met:

**i.** Lifting of personnel

**ii.** Lifting over operational or occupied areas

**iii.** Suspended work platforms are used

**iv.** Lifts that exceed 80% of the cranes rated load chart capacity

**v.** Or required by site HSE personnel

**C.** When a lift plan is required, it shall be utilized in conjunction with and attached to a Lilly Safe Work Permit. The lift plan must be submitted to the Local Contractor HSE Advisor and the Lilly Work Area Contract prior to executing the lift.

**D.** Operator Requirements

**i.** When a lift plan is required; the operator shall review the plan and sign-off prior to lifting.

**ii.** Prior to lifting a load over operational or occupied areas, the Lilly Work Area Contact and Contractor HSE Advisor shall be notified.

**E.** Crane Suspended Work Platforms

**i.** Suspended work platforms shall only be used when all parties involved *(Responsible Host, Lilly Work Area Contact, Contractor HSE Advisor, and Contract Firm)* agree on and document that there is not a safer means or possible way to reach the elevation. The plan to use the Suspended Work Platform will be deemed acceptable by a Professional Engineer *(PE)*. The platform must have a current inspection.

*Complete inspection of the crane must be performed at 1-month to 12-month intervals depending on its activity, severity of service, and environmental conditions. The inspection must include the following areas: identification of deformed, cracked, corroded, worn, or loose members or parts; the brake system; limit indicators (wind, load); power plant, and electrical apparatus* ***(§1910.179(j)(3), §1910.180(d)(4), and §1910.181(d)(3)(i))****.*

*The employer must ensure that, prior to operating any equipment covered under Subpart CC, the person operating the equipment is qualified or certified to operate the equipment. Exceptions: operation of derricks, sideboom cranes, and equipment with a rated hoisting/lifting capacity of 2,000 pounds or less.* ***1926.1427(a)(1) through (3)***

*On equipment with a rated hoisting/lifting capacity of 2,000 pounds or less the employer must train each operator, prior to operating the equipment, on the safe operation of the type of equipment the operator will be using.* ***1926.1441(e)***

*Determine if any part of the equipment, load line or load (including rigging and lifting accessories), if operated up to the equipment's maximum working radius in the work zone, could get closer than 20 feet to a power line. If so, the employer must meet the requirements in Option (1), Option (2), or Option (3) of this section, as follows* ***1926.1408(a)(2)****:*

*- Option (1)--Deenergize and ground. Confirm from the utility owner/operator that the power line has been deenergized and visibly grounded at the worksite* ***1926.1408(a) (2)(i)****.*

*- Option (2)--20 foot clearance. Ensure that no part of the equipment, load line, or load (including rigging and lifting accessories), gets closer than 20 feet to the power line by implementing the measures specified in paragraph (b) of this section* ***1926.1408(a)(2)(ii)****.*

*- Option (3)—reference Table A for additional clearance requirements* ***1926.1408(a)(2)(iii)***

**11. Demolition**

- **A.** Prior to performing demolition activities (*dismantling, razing, or wrecking of any fixed building or structure or any part thereof)*, a demolition plan shall be completed, documented and shared with the Responsible Host, Lilly Work Area Contact and Contractor HSE Advisor. Should the scope of work change, the plan must be re-evaluated.
- **B.** Contract Firms shall contact their Lilly Work Area Contact to verify that all utilities have been disconnected *(e.g. water, steam, chemical, etc.)*.
- **C.** Signs and barricades shall be in place so that persons who are not involved in the demolition cannot enter demolition areas.
- **D.** Any time a written demolition plan is utilized it shall be attached to the Safe Work Permit *(SWP)*.
- **E.** Work activity disturbing any land must be conducted in accordance with Section 43, Storm Water Management.

**F.** Refer also to the Asbestos Policy, Lead Policy and Waste Disposal sections in this booklet.

## 12. Electrical Safety

**A.** The National Fire Protection Association's Standard for Electrical Safety in the Workplace (NFPA 70E version 2009) has been adopted by Lilly in its entirety. Contract Firms are expected to comply with provisions of the standard.

**B.** Procedures for contacting emergency response must be in place prior to commencement of work.

**C.** Ground fault circuit interrupters *(GFCI's)* or "GFCI Protected" receptacles are required for use with all temporary 120 Volt power and all electrical devices *(saws, drills, battery chargers, vacuum cleaners, etc.)* that may be plugged into a receptacle outlet.

**D.** GFCI's will be tested prior to inserting a plug into the device or connecting to a protected extension cord. Ground Fault Circuit Interrupters *(GFCI's)* or "GFCI Protected" that fail testing must be destroyed or immediately removed from service. Test shall consist of:

- **i.** Press the "Test" button,
- **ii.** Verify the "Reset" button has been tripped. *(If not, the device is not operating properly.)*
- **iii.** Press the "Reset" button.

**E.** Questions regarding the electrical classification of an area shall be asked during the Safe Work Permit *(SWP)* interaction.

**F.** A substation specific written plan is required before any medium voltage *(1000 Volts - 25,000 Volts)* electrical substation switching occurs. The appropriate plant Electrical Engineer and Contractor HSE Advisor must review this plan and attach it to the SWP.

**G.** Contract Firm Personnel MUST wear PPE for the highest potential exposure. Mitigate potential exposure by guarding or insulating the work area. Consult Contract Firm or contact the Local Electrical Engineer if there are additional questions or concerns regarding PPE.

**H.** Only extension cords meeting the applicable ANSI standards shall be used. Flat extension cords shall not be used.

- **i.** Extension cords shall be routed out of traffic areas.
- **ii.** Extension cords must not be fastened with staples, hung from nails, or suspended by wire or be in contact with any sharp edged surface.

**I.** All energized work requires the completion of the Energized Electrical Work Permit and will require Director-level approval.

- **i.** Energized work should be done as a last resort. Do not perform energized work if it is possible to de-energize the equipment/circuit. De-energizing the system must not create a greater hazard than performing energized work.
- **ii.** Energized work shall be approved by the Craftsperson's supervisor. May not always be an electrician.
- **iii.** Energized work will be approved by the Lilly's building/area representative when work is being done in an operating, occupied facility.
- **iv.** Energized work will be approved by the Lilly Work Area Contact on a new facility not yet turned over to the user.
- **v.** Energized work will be done by qualified personnel only.

**vi.** Barriers will be used to keep other than qualified personnel outside of the Limited Approach Boundary.

**J.** No unrated electrical device is allowed in electrically classified areas (e.g. cell phones, portable electronic devices, etc.)

OSHA recommends the following: Conduct daily visual inspections of extension cords and cord- and plug-connected equipment for defects. Equipment found damaged or defective shall not be used until repaired.

***Guarding***

*Except as elsewhere required or permitted by 29 CFR 1910, subpart S, live parts of electric equipment operating at 50 volts or more shall be guarded against accidental contact by use of approved cabinets or other forms of approved enclosures or by any of the approved means* ***(§1910.303(g)(2))****.*

***Safety-Related Work Practices***

*Unqualified employees and mechanical equipment must be at least 10 feet (305 centimeters) away from overhead power lines. If*
*the voltage to ground exceeds 50,000 volts (50kV), the minimum clearance distance should be increased by 4 inches (10 centimeters) for each additional 10,000 volts (10kV)* ***(§1910.333(c)(3)(i)(A))****.*

*OSHA requires portable ladders to have nonconductive side rails if used by employees who would be working where they might contact exposed energized circuit parts* ***(§1910.333(c)(7))****.*

**13. Excavations**

- **A.** Before opening any excavation, efforts shall be made to determine if any underground utilities exist in the area.
- **B.** Notify the Lilly Work Area Contact when an excavation will be occurring so underground utilities can be identified.
- **C.** Prior to land disturbing activity/excavation, storm water controls need to be implemented in accordance with Section 43, Storm Water Management.
- **D.** If suspected soil contamination is discovered during an excavation, stop the excavation, and notify the Lilly Work Area Contact immediately. The Lilly Work Area Contact will contact the Local Lilly Environmental Representative.
- **E.** Site-specific requirements may require a permit for excavation 4 feet or greater in depth.
- **F.** Site-specific guidelines and permits shall be followed before excavation or trenching work begins. Contact your Lilly Work Area Contact for more information.
- **G.** Soil sampling may be required prior to allowing any personnel to enter an excavation. Contact your Lilly Work Area Contact to determine if this requirement applies.
- **H.** Proper barricades must be extended around the outside of the excavation.

*Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection shall be provided by placing and keeping such materials or equipment at least 2 feet (0.6 meters) from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.* ***1926.651(j)(2)***

*A stairway, ladder, ramp, or other safe means of egress shall be located in trench excavations that are 4 feet (1.2 meters) or more in depth so as to require no more than 25 feet (7.6 meters) of lateral travel for employees.* ***1926.651(c)(2)***

*Each employee at the edge of an excavation 6 feet deep (1.8 meters) or more in depth shall be protected from falling by guardrail systems, fences, barricades when the excavations are not readily seen because of plant growth or other visual barrier.* ***1926.501(b)(7)(i)***

**14. Exposure to Lilly Compounds**

**A.** It is important to get immediate medical evaluation in the event of an actual, potential or perceived exposure to chemicals or compounds. Lilly ERT must be immediately notified for all chemical exposures and/or emergency situations. See pages 7-9 for contact numbers.

**B.** Safety showers and eyewashes are available wherever chemicals are stored or used. If exposure occurs, most SDS/MSDS recommend a flushing of the body part/eye for at least 15 minutes.

**C.** If the exposure involves a chemical or compound, developed or manufactured by Lilly, the exposed employee(s) must be taken to Lilly's Employee Health Services for evaluation. If exposure is from a chemical a contractor brought on to Lilly's site, the exposed employee(s) should be evaluated by the Contractor Nurse if not an emergency situation.

## 15. Fall Protection Systems

**A.** For additional information see: Section 24, Ladders; Section 29 Manlifts/Scissor Lifts; and Section 41, Scaffolding.

**B.** A Fall Protection Analysis shall be conducted for all work occurring at elevated levels and can be done as part of the safety planning for the task. When a fall hazard is present (e.g., *elevated work creates inadequate guard railing, work over/ near mechanical, thermal or chemical hazards, or openings in walls)* a documented fall protection plan shall occur.

**C.** Contract Firm must correct or provide fall prevention methods for all identified fall hazards in the workplace, or eliminate the fall hazard.

**D.** If the physical environment does not allow for conventional fall protection/prevention, a Task Specific Fall Analysis shall be performed to determine a method to minimize fall exposure. The Responsible Host or Lilly Work Area Contact shall approve Task Specific Fall Analysis prior to execution. A personal fall arrest system or a means to prevent a fall *(e.g. guardrail, warning lines)* is required when an individual's feet are 6 feet or more above the floor or grade level. This includes working from scaffolds, ladders, roofs, structural steel, and mezzanines that do not have proper fall prevention devices in place.

- **i.** Full body harnesses with shock absorbing lanyards are the preferred means of fall protection while working in areas over 6 feet in height when no other means of fall protection or prevention can be obtained.
- **ii.** Personal fall arrest systems, when stopping a fall, shall be designed and used so that the Contract Firm Personnel will be connected 100% of the time when above 6 feet *(e.g. two shock absorbing lanyards, double-headed shock absorbing lanyards, full body harness, etc.)*.
- **iii.** Contract Firm Personnel shall contact their supervisor or competent person to determine proper anchorage points for fall protection.
- **iv.** Personal Fall Arrest design documents must be submitted to the site Responsible Host *(or person designated by the Responsible Host)*, maintained at the job site, and available for review if requested.

**E.** Unless approved in writing by a Qualified Person such as a Professional Engineer, it is prohibited to tie-off to the following, but not limited to:

- **i.** Electrical Conduit
- **ii.** Chemical Process Lines
- **iii.** Conduit/Pipe Hangers
- **iv.** Fire protection lines

**v.** Other points not designed for fall arrest.

***Safety monitoring systems***
*The employer shall designate a competent person to monitor the safety of other employees and the employer shall ensure that the safety monitor complies with the following requirements:* ***1926.502(h)(1)(i)***

*The safety monitor shall be competent to recognize fall hazards;* ***1926.502(h)(1)(ii)***

*The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;* ***1926.502(h)(1)(iii)***

*The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee being monitored;* ***1926.502(h)(1)(iv)***

*The safety monitor shall be close enough to communicate orally with the employee; and* ***1926.502(h)(1)(v)***

*The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.*

***1926.502(h)(2)***
*"Leading edges"*
*Where employees are exposed to falling 6 feet (1.8 meters) or more from an unprotected side or edge, the employer must select either a guardrail system, safety net system, or personal fall arrest system to protect the worker.*
***1926.501(b)(1)***
*A personal fall arrest system consists of an anchorage, connectors, body harness and may include a lanyard, deceleration device, lifeline, or a suitable combination of these. Body belts used for fall arrests are prohibited.*

*1****926.500(b) and 1926.502(d)***
"*Hoist Area"*
*Each employee in all area shall be protected from falling 6 feet (1.8 meters) or more by guardrail systems or personal fall arrest systems. In a hoist area, If guardrail systems (or chain gate or guardrail) or portions thereof must be removed to facilitate hoisting operations, as during the landing of materials, and a worker must lean through the access opening or out over the edge of the access opening to receive or guide equipment and materials, that employee must be protected by a personal fall arrest system.*

***1926.501(b)(3)***
*"Holes"*
*Each employee on walking/working surfaces shall be protected from falling through holes (including skylights) more than 6 feet (1.8 m) above lower levels, by personal fall arrest systems, covers, or guardrail systems erected around such holes.*

***1926.501(b)(4)(i)***
*Each employee on ramps runways, , and other walkways shall be protected from falling 6 feet or more to lower levels by guardrail systems.*

***1926.501(b)(6)***
*"Excavations"*
*Each employee at the edge of an excavation 6 feet deep (1.8 meters) or more in depth shall be protected from falling by guardrail systems, fences, barricades when the excavations are not readily seen because of a visual barrier.*

***1926.501(b)(7)(i)***
*Each employee at the edge of a well, pit, shaft, and similar excavation 6 feet (1.8 meters) or more in depth shall be protected from falling by guardrail systems, fences, barricades, or covers.*

***1926.501(b)(7)(ii)***

*"Overhand bricklaying and related work"*

*Each employee performing overhand bricklaying and related work 6 feet (1.8 meters) or more above lower levels, on surfaces other than scaffolds, shall be protected by guardrail systems, safety net systems, or personal fall arrest systems, or shall work in a controlled access zone. All employees reaching more than 10 inches (25.4 centimeters) below the level of a walking/working surface on which they are working shall be protected by a guardrail system, safety net system, or personal fall arrest systems* ***1926.501(b)(9)***

*"Roofing – low slope roofs"*
*Each employee engaged in roofing activities on low-slope roofs with unprotected sides and edges 6 feet (1.8 meters) or more above lower levels shall be protected from falling by guardrail, safety net, or personal fall arrest systems or a combination of a:*

*-Warning line system and guardrail system,*
*-Warning line system and safety net system,*
*-Warning line system and personal fall arrest system, or*
*-Warning line system and safety monitoring system.*

*On low-slope roofs 50 feet (15.2 meters) or less in width, the use of a safety monitoring system without a warning line system is permitted.* ***1926.501(b)(10)***

*"Roofing- steep roof"*
*Each employee on a steep roof with unprotected sides and edges 6 feet (1.8 meters) or more above lower levels shall be protected by guardrail systems with toe boards, safety net systems, or personal fall arrest systems.* ***1926.501(b)(11)***

*OSHA standards* ***(§1910.66, Appendix C, paragraphs (c)(1) through (c)(11))*** *also require that:*

- *Horizontal lifelines, where used, be designed, and installed as part of a complete personal fall arrest system, with a safety factor of at least two, under the supervision of a qualified person; anchorages be capable of supporting at least 5,000 pounds (22.2 kN) per employee attached, or designed, installed, and used as part of a complete personal fall arrest system, with a safety factor of at least two, under the supervision of a qualified person; and Personal fall arrest systems must be rigged so that an employee can neither free fall more than six feet (1.8 m), nor contact any lower level* ***(§1910.66, Appendix C, paragraph (e)(3))****.*

**16. <u>Fire Protection and Prevention</u>**

**A.** A 20 lb. ABC rated fire extinguisher is the minimum requirement for adequate protection in construction and maintenance areas.

**B.** Fire extinguishers supplied/owned by the Contract Firm must be inspected according to OSHA/NFPA requirements. All extinguishers must have a documented inspection every 30 days.

**C.** If a fire extinguisher is used, it must be recharged immediately. In addition, if a Lilly extinguisher is used, contact your Lilly Work Area Contact as soon as possible.

*For information regarding matches and lighters, see General Lilly Information, page 10.*

**17. <u>Flammable Material Storage</u>**

**A.** All flammable materials *(e.g., gasoline)* shall be stored only in areas approved by your Lilly Work Area Contact.
**B.** Any leak or spill *(greater than 1pint/1pound)* of flammable material must be reported immediately to Security and the Lilly Work Area Contact.
**C.** All gasoline cans must meet applicable ANSI standards; have a self-closing lid, flame arrestor and prominent markings including the container's contents and an appropriate warning label.
**D.** All containers (including secondary) must be labeled with the contents and hazardous information, in good condition and remain closed when not in use.

*Only approved containers and portable tanks shall be used for storing and handling flammable and combustible liquids* ***1926.152(a)(1)***

*No more than 25 gallons (94.7 liters) of flammable or combustible liquids shall be stored in a room outside of an approved storage cabinet. No more than three storage cabinets may be located in a single storage area.* ***1926.152(b)(1) and (3)***

*Storage in containers outside buildings shall not exceed 1,100 gallons (4,169 liters) in any one pile or area. The storage area shall be graded to divert possible spills away from buildings or other exposures, or shall be surrounded by a curb or dike.* ***1926.152(c)(1) and (3)***

*Outdoor portable tanks shall be located at least 20 feet (6 meters) from any building.*

*Flammable liquids must be kept in covered containers or tanks when not actually in use* ***(§1910.106(e)(2)(iv)(a))***.

*For fire protection purposes, the quantity of flammable or combustible liquid that may be located outside of an inside storage room or storage cabinet in a building or any one fire area of a building must not exceed* ***(§1910.106(e)(2)(ii)(b))****:*

- *25 gallons (95 liters) of Class IA liquids in containers;*
- *120 gallons (456 liters) of Class IB, IC, II, or III liquids in containers; or*
- *660 gallons (2,508 liters) of Class IB, IC, II, or III liquids in a single portable tank.*

*Flammable or combustible liquids must be drawn from or transferred into vessels, containers, or portable tanks within a building only through a closed piping system; from safety cans, by means of a device drawing through the top; or from a container or portable tanks by gravity through an approved self-closing valve. Transferring by means of air pressure on the container or portable tanks must be prohibited* ***(§1910.106(e)(2)(iv)(d))****.*

### *Containers and Portable Tank Storage*

*Not more than 60 gallons (228 liters) of Class I or Class II liquids, nor more than 120 gallons (456 liters) of Class III liquids may be stored in a storage cabinet* ***(§1910.106(d)(3)(i))****.*

*Flammable or combustible liquids, must not be stored so as to limit use of exits, stairways, or areas normally used for the safe egress (exit) of people* ***(§1910.106(d)(5)(i))****.*

*Outside storage areas must be graded so as to divert spills away from buildings or other exposures, or be surrounded with curbs at least 6 inches (15 centimeters) high with appropriate drainage to a safe location for accumulated liquids. The storage areas must be protected against tampering or trespassing, where necessary, and must be kept free of weeds, debris, and other combustible material not necessary to the storage* ***(§§1910.106(d)(6)(iii) and (iv))****.*

*Class I liquids must not be dispensed into containers unless the nozzle and container are electrically interconnected* ***(§1910.106(e) (6)(ii))****.*

**18. <u>Grinders</u>-** *Lilly does not have specific procedures for grinders at this time. Please see regulatory requirements.*

*Abrasive wheel safety guards must cover the spindle end, nut, and flange projections. Safety guards must also be mounted so as to maintain proper alignment with the wheel, and the strength of the fastenings must exceed the strength of the guard, except:*

- *Safety guards on all operations where the work provides a suitable measure of protection to the operator may be so constructed that the spindle end, nut, and outer flange are exposed* ***(§1910.215(a)(2)(i) and §1910.243(c)(1)(ii)(b))****;*
- *Where the nature of the work is such as to entirely cover the side of the wheel, the side covers of the guard may be omitted* ***(§1910.215(a)(2)(i) and §1910.243(c)(1)(ii)(b))****; and*
- *The spindle end, nut, and outer flange may be exposed on portable machines designed as portable saws, as well as on other machines designed for, and used with, type 6, 11, 27, and 28 abrasive wheels, cutting off wheels, and tuck pointing wheels* ***(§1910.215(a)(2)(ii) and §1910.243(c)(1)(ii)(c))****.*

*Work rests on offhand grinding machines must be used to support the work. They must be of rigid construction and designed to be adjustable to compensate for wheel wear. Work rests must also be kept adjusted closely to the wheel with no more than a 1/8 inch (3.2 millimeters) opening. This will prevent the work from being jammed between the wheel and the rest, which may cause wheel breakage. Further, during any wheel adjustments the wheel must be motionless and wheel rests must be securely clamped after each adjustment* ***(§1910.215(a)(4))****.*

*Abrasive wheel safety guards for bench and floor stands and for cylindrical grinders must not expose the grinding wheel periphery for more than 90 degrees or ¼ of the periphery (bench and floor stands) and 180 degrees (cylindrical grinders). The exposure must begin at a point not more than 65 degrees above the horizontal plane of the wheel spindle. The protecting member must be adjustable for variations in wheel size so that the distance between the wheel periphery and adjustable tongue (tongue guard) or end of the peripheral member at the top must never exceed ¼ inch (6 millimeters)* ***(§§1910.215(b)(3) through (4), and (b)(9))****.*

*Machines designed for a fixed location must be securely anchored to prevent "walking," or designed in such a manner that prevents movement* ***(§1910.212(b))****.*

*Portable abrasive wheel tools used for external grinding shall be provided with safety guards, except when the wheels are 2 inches (5 centimeters) or less in diameter or the work location makes it impossible (then a wheel equipped with safety flanges shall be used).*

***1926.303(c)(3)***
*Portable abrasive wheel tools used for internal grinding shall be provided with safety flanges, except when the wheels are 2 inches (5 centimeters) or less in diameter or the wheel is entirely inside the work.* ***1926.303(c)(4)***

**19. Hand and Power Tools -** *Lilly does not have specific procedures for hand, power or powder actuated (See Permits, Tags, and Associated Policies, Section 32, for powder actuated tools permitting requirements) tools at this time. Please see regulatory requirements. All manufacture requirements must be followed on all hand and power tools.*

The following information is from the OSHA Outreach Training:
OSHA has several recommendations on the use of hand and power tools:
Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance.
Employees should be trained in the use of all tools - not just power tools. They should understand the potential hazards as well as the safety precautions to prevent those hazards from occurring.

The following general precautions should be observed by power tool users:

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil and sharp edges.
- Disconnect tools when not in use, before servicing, and when changing accessories such as blades, bits and cutters.
- All observers should be kept at a safe distance away from the work area.
- Secure work with clamps or a vise, freeing both hands to operate the tool.
- Avoid accidental starting. The worker should not hold a finger on the switch button while carrying a plugged-in tool.
- Tools should be maintained with care. They should be kept sharp and clean for the best performance. Follow instructions in the user's manual for lubricating and changing accessories.
- Be sure to keep good footing and maintain good balance.
- The proper apparel should be worn. Loose clothing, ties or jewelry can become caught in moving parts.
- All portable electric tools that are damaged shall be removed from use and tagged "Do Not Use."

More information can be found at http://www.osha.gov/doc/outreachtraining/outreachtraining.html

**20. Hazardous Material & Chemical Storage**

**A.** Material storage shall be inspected by the Contract Firm monthly for proper storage practices.
**B.** Follow NFPA procedure for storage of incompatibles.
**C.** The guide on the back of this manual can be used as a reference to help understand hazardous material labels on primary and secondary containers.
**D.** The Lilly Work Area Contact shall be notified of all hazardous materials brought on site and consulted regarding questions concerning specific requirements on the materials storage.
**E.** Contract Firm must maintain a list of all hazardous materials brought on site. This list shall be available for review upon request.
**F.** ALL CONTAINERS (INCLUDING SECONDARY) MUST BE LABELED WITH THE CONTENTS AND HAZARDOUS INFORMATION, IN GOOD CONDITION AND REMAIN CLOSED WHEN NOT IN USE.
**G.** SEE SECTION 42 ON SPILL PREVENTION FOR ADDITIONAL STORAGE REQUIREMENTS.

## 21. Heavy Equipment

**A.** Documentation of training records or other proof of training/qualifications shall be available upon request.
**B.** Any use of Lilly equipment must follow site-specific procedures and approval processes. *(See Section 48, Use of Lilly Equipment)*
**C.** All manufacturer requirements must be followed on all heavy equipment.

## 22. Hot Work

**A.** Planning
  **i.** Planning for hot work and necessary equipment shall be completed and documented *(e.g. Hot Work Permit, Job Plan),* prior to performing work activities. Documentation shall be shared with the Lilly Work Area Contact during the hot work permit request process prior to the commencement of work.
  **ii.** The area, within a 35-foot radius of the hot work activity, will be reviewed. This includes areas above, below or behind walls and floors.
    **1)** Any openings or penetrations that would allow a spark or flame to pass through to another area shall be sealed *(at least temporarily)* or otherwise protected. If protection is not possible or adequate, fire watch(s) shall be employed in the affected area.
    **2)** Combustible material within the 35-foot radius shall be removed or protected prior to commencement of work.
    **3)** Should fire blankets be employed, they shall be free of holes and provide adequate protection.
  **iii.** Should the scope of work or environmental conditions change, the planning must be re-evaluated.
**B.** All hot work must be reviewed and authorized by your Lilly Work Area Contact prior to commencement of work.
**C.** Fire Watch
  **i.** Contract Firms are required to provide trained fire watches for all jobs requiring a Hot Work Permit. Flame or spark producing activities, in more than one area of the same floor or above the first floor, may require multi-level permits and fire watch protection

**ii.** All fire watches must be trained on the use of fire extinguishers in accordance with OSHA standards. Contact your Lilly Work Area Contact or Contractor HSE Advisor for additional information on site-specific requirements for fire watch personnel.

**iii.** The fire watch must remain in the area until the job is completed. The fire watch must remain in the area for a minimum of thirty *(30)* minutes following completion of a job which involves high spark producing or open flame activity.

**iv.** There are two different classes of fire watches: A and B. It will be decided when permit is given which type will be required. Fire Watch Class A has a sole role to monitor hot work and control fire hazards within 35' of the work activity. Fire Watch Class B may assist the craftsperson on a limited basis along with monitoring hot work and controlling fire hazards within 35' of the work activity.

**v.** Fire extinguishers are to be in close proximity of the work area *(25 feet minimum)* when hot work is being performed.

**vi.** Fire extinguishers dedicated to an area/building shall not be used by fire watch personnel except during emergencies. Contract Firms may obtain a "fire watch" extinguisher from a designated location.

**D.** Hot Work Permits

**i.** A Hot Work permit must be issued before any spark-producing work is completed in an explosive environment. Examples include:

**1)** Using any spark producing device in a hazardous area.
**2)** Performing any high spark producing activity *(grinding, chop saws, etc.)*.
**3)** Performing any open flame activity *(welding, cutting, heating, etc.)*.
**4)** Using temporary power from an explosion proof outlet.
**5)** When opening any explosion proof electrical equipment.

**ii.** Permits shall be issued, by the Lilly Work Area Contact *(or designated HWP representative)*, prior to the start of work and at the beginning of each shift. The Hot Work Permit must be completed, in its entirety, and displayed prominently at the job location, before beginning work.

**iii.** Following completion of the work, the bottom half of the permit shall be returned to the Lilly Work Area Contact.

**iv.** The Contract Firm shall be responsible for ensuring their personnel have a complete understanding of the use of the Hot Work Permit.

**v.** Hot Work Permits are valid for one shift only and are task specific.

**vi.** Work performed in an open shop area is exempt from requiring a Hot Work Permit. Contact your Lilly Work Area Contact and/or Contractor HSE Advisor for review of open shop requests.

**vii.** Contract Firms shall provide fire extinguishers for all operations requiring a Hot Work Permit.

## 23. Housekeeping

**A.** Walking and working surfaces shall be kept free of excess debris and tools at all times. Hazards, presented by poor housekeeping, include but are not limited to:

i. Slipping hazards *(water, oil, grease, etc.)*
ii. Tripping hazards *(cords, pipe, etc.)*
iii. Fire hazards *(trash, flammable liquid storage, etc.)*

**B.** Materials that present a fall hazard when stacked shall be secured to prevent them from falling or creating trip hazards.

**C.** At job completion and/or demobilization of an area, the Contract Firm is responsible for ensuring the area is turned over to Lilly in a clean and normal condition.
- **i.** All waste shall be removed from the jobsite and disposed of in accordance with Section 49, Waste Disposal. All chemicals *(waste or otherwise)* remaining after the job shall be managed as directed by the Lilly Work Area Contact in accordance with local policies and procedures. All containers (including secondary) must be labeled with the contents and hazardous information, in good condition, and remain closed when not in use.
- **ii.** Remove all temporary environmental controls, containment structures, signage and other temporary items at the conclusion of the project.

**D.** See Section 12, Extension cords

**E.** Debris and tools shall be picked up and removed from the job daily or as required by Lilly.

**F.** Streets shall be kept clear of debris and spillage from hauling as required by Lilly. The Lilly Work Area Contact shall be notified if there are any potential or known fugitive dust emissions that escape beyond Lilly property line or boundaries of the property, right-of-way or easement at a Lilly site.
- **i.** Trucks hauling bulk material *(trash, earth, aggregate, etc.)* shall have tarps covering material in order to minimize possibility of material coming out of the bed.

**G.** Contract Firm shall remove from storage and staging areas all shipping containers, packing material, and debris to a dumpster on a daily basis.

## 24. Ladders

**A.** All ladders must be heavy duty, industrial strength and in good working condition.

**B.** Each ladder shall be visually inspected prior to each use.

**C.** Portable ladders constructed of wood or metal are prohibited for use on Lilly sites *(except for entry into process tanks)*.

**D.** Contract Firm Personnel working 6 feet or more off the ground from a step, straight, extension or platform ladder must use personal fall protection *(See Section 15 for Fall Protection Requirements)*.

**E.** Ensure ladders are removed when work is complete.

*Stepladders must be equipped with a metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in an open position. The spreader must have all sharp points covered or removed to protect the user* ***(§1910.25(c)(2) (i)(f) and §1910.26(a)(3)(viii))***.

*Ladders must be inspected frequently and those that have developed defects must be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use"* ***(§1910.25(d)(1)(x) and §1910.26(c)(2)(vii))***

*Non-self-supporting ladders must be erected on a sound base with the base of the ladder a distance from the wall or upper support equal to one quarter the length of the ladder and placed to prevent slipping. Where the potential exists for slipping, the ladder must be lashed, or held in position. Ladders must not be used in a horizontal position as platforms, runways, or scaffolds* ***(§§1910.25(d)(2)(i) through (iii) and §§1910.26(c)(3)(i) and (iii))***.

*The top of a ladder used to gain access to a roof must extend at least 3 feet (0.9 meters) above the point of contact (support), at eave, gutter, or roofline* ***(§1910.25(d)(2)(xv))***.

*Portable ladders must have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized parts* ***(§1910.333(c)(7))***.

*A ladder (or stairway) must be provided at all work points of access where there is a break in elevation of 19 inches (48.2 centimeters) or more except if a suitable ramp, runway, embankment, or personnel hoist is provided to give safe access to all elevations.* ***1926.1051(a)***

*Portable and fixed ladders with structural defects – such as broken or missing rungs, cleats or steps, broken or split rails, or corroded components – shall be withdrawn from service by immediately tagging "DO NOT USE" or marking in a manner that identifies them as defective, or shall be blocked, such as with a plywood attachment that spans several rungs. Repairs must restore ladder to its original design criteria. 1****926.1053(b)(16), (17) (i) through (iii) and (18)***

*Portable non-self-supporting ladders shall have clear access at top and bottom and be placed at an angle so the horizontal distance from the top support to the foot of the ladder is approximately one-quarter the working length of the ladder.****1926.1053(b)(5)(i) and (b)(9)***

*Portable ladders used for access to an upper landing surface must extend a minimum of 3 feet (0.9 meters) above the landing surface, or where not practical, be provided with grab rails and be secured against movement while in use.* ***1926.1053(b)(1)***

*Ladders must have nonconductive side rails if they are used where the worker or the ladder could contact energized electrical conductors or equipment.* ***1926.1053(b)(12)***

**25. Lead Policy**

- **A.** Notify the Lilly Work Area Contact before beginning any project that will disturb painted surfaces or other materials that may contain lead. The Lilly Work Area Contact will work with the Lilly SAC to determine if a potential lead hazard exists. The SAC will coordinate sampling of the area for lead-containing materials.
- **B.** Disturbance of lead-containing materials could occur through activities including but not limited to the following: blasting, welding, cutting, torch burning, sanding, scraping, grinding, roofing repair or demolition. Lead is commonly found in paints, varnishes, primers, piping, solder and flashings.
- **C.** Only Contract Firms trained in accordance with the OSHA lead standard, as well as all other applicable Federal, State, and Local requirements *(including requirements of the Hazard Communication Standard)*, shall be allowed to perform lead abatement work or any other activity that could result in exposure to lead. The Lilly SAC must approve any Contract Firm that is to perform lead abatement work.
- **D.** Any Contract Firm Personnel who may disturb lead-containing materials during work activities shall have knowledge of the types of materials that may contain lead and the process for notification to the Lilly Work Area Contact.
- **E.** Contract Firms performing work described in this section must first submit a written HSE work plan to the Lilly Work Area Contact and the Contractor HSE Advisor. This plan shall include all information required by the OSHA standard as well as any other applicable Federal, State and Local requirements.
- **F.** The Contract Firm shall ensure any lead-containing waste is disposed of in accordance with all applicable local, State, Federal and Lilly requirements/policies/guidelines and shall be coordinated with the Lilly Work Area Contact. Lilly shall approve the disposal site for any lead-containing waste. Contract your Lilly Work Area Contact for site-specific requirements.

**26. Lighting**

- **A.** All construction and Contract Firm work areas must have sufficient lighting to allow personnel to see the work surface and the immediate surrounding area.
- **B.** All fluorescent or mercury bearing lamps for disposal must be kept in a closed container and dated. All used fluorescent lamps shall be managed per the local policies and procedures. Contact your Lilly Work Area Contact for disposal requirements.

**27. Liquefied Petroleum Gas (LPG)**

- **A.** LPG is not allowed on Lilly sites without specific approval from the on-site Lilly Fire Inspector.
- **B.** LPG cannot be stored inside any Lilly building. Only those cylinders in use shall be allowed in a building.
- **C.** LPG cylinders may be left on LPG powered equipment overnight and on weekends provided the valves are closed.

**28. Lockout/Tag-out: Control of Hazardous Energy**

- **A.** **Before beginning work on a process, system or piece of equipmen**t, all energy sources *(electrical, mechanical, thermal, pneumatic, chemical, hydraulic, etc.)* must be purged, dissipated and locked out. Lilly owned systems or equipment shall be

locked out by Lilly Personnel or their designated representative and verified by the Contract Firm Personnel. Contract Firm Personnel may perform Lockout/Tagout *(LO/TO)* with exceptions established by Lilly and with approval from the Business Area's Engineering Director or above. The Contract Firm Personnel must be knowledgeable of the process, system, or piece of equipment, understand the risk and accept ownership of the lockout. **The Contract Firm Personnel should not agree to perform the LO/TO if he/she is not confident in understanding the process, system or piece of equipment.** If a Business Area opts to allow Contract Firm Personnel to conduct, their own LO/TO the Business Area will provide a written local LO/TO process that the Contract Firm Personnel will use. Contact the Lilly Work Area Contact, local HSE Department Representative or a Contractor HSE Advisor for the local LO/TO procedure.

**B.** Contract Firms must train their personnel on all OSHA LO/TO requirements and have written documentation to verify this training. If Contract Firm Personnel will be performing lockout, Contract Firms will also ensure those individuals are trained on the local Lilly Business Area lockout process.

**C.** In the event a lockout must be performed where only one energy source has been identified or no equipment specific procedure exists, the general lockout *(8-step procedure)* shall be used.

**D.** In the event a lockout must be performed where two or more energy sources have been identified, the procedure for multi-point lockouts must be used.

**E.** Verify site specific LO/TO requirements before beginning work.

**F.** The Lilly Work Area Contact or the local HSE Department Representative will be responsible for obtaining site lockout procedures including when the Contract Firm is performing the lockout.

**G.** Lilly will require all equipment to be in place to achieve proper lockout before work commences. The Lilly Work Area Contact, local HSE Department Representative or approved Contract Firm Personnel will be responsible for requiring that each authorized Contract Firm Personnel performing work requiring lockout shall apply a safety lock specifically designed for that purpose. Lock type will be as specified by local procedure.

**H.** Lilly will, at its sole option, either supply Lilly safety locks to the Contract Firm for the purpose of LO/TO or require the Contract Firm to provide their own personal safety locks. *(Business Area procedures may require the use of Lilly issued safety locks. Please contact your Lilly Work Area Contact or Contractor HSE Advisor for additional information.)*

**I.** Contract Firm safety locks shall be recognizable by uniform size, shape and color.

**J. General Lockout ("8-step" procedure)**

- **i.** Know the equipment. The Lilly Work Area Contact, local HSE Department Representative or approved Contract Firm Personnel shall obtain the proper lockout procedure for the equipment to be serviced.
- **ii.** Notify others. The Lilly Authorized Employee or an approved Contact Firm shall ensure communication to all affected personnel in the area that a LO/TO device is being installed.
- **iii.** Shut off power. If the equipment is operating, the Lilly Authorized Employee, or approved Contract Firm Personnel shall shut the system down using the normal standard operating procedures *(e.g. stop button, toggle switch, computer controls, etc.).*

**iv.** Disconnect and lockout all energy sources. Operate the valve, switch or other energy-isolating device so the equipment is isolated from its primary energy source and lock the isolation device with the appropriate Lilly safety lock. The Lilly Authorized Employee or approved Contract Firm Personnel will ensure the proper placement of their personal locks.

**v.** Control and dissipate secondary energy. Stored secondary energy *(such as that in springs, elevated machine members, rotating fly wheels, hydraulic systems, air, gas, steam or water pressure, etc.)* must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.

**vi.** Verify the lockout. After determining that no persons are exposed, attempt to physically start the equipment using standard operating procedures to ensure the equipment will not operate. Verification of the lockout is one of the most important steps in the lockout procedure.

**vii.** Keep the lockout in force. Keep the lockout in force throughout all shift changes until the job is complete.

**viii.** Unless otherwise instructed, all Contract Firm personal locks shall be removed at the end of each shift. If a Contract Firm applied lock is left in place at the end of shift, the Lilly Authorized Employee must be notified.

**ix.** Contract Firm Personnel shall re-verify the lockout the following shift or the next day shall again apply their own personal locks.

**x.** If a lock is left on and needs to be removed for any reason, Lilly lockout procedures require the Lilly Work Area Contact to obtain a "Lock Removal Authority" form.

**xi.** Finish safely. At the completion of the job, remove all tools and equipment. Make sure that all equipment is operationally intact, clean the area and notify all affected personnel that start up will be occurring.

**K. Multi-Point Lockout**

**i.** The Lilly Work Area Contact, local HSE Department Representative or approved Contract Firm Personnel shall obtain a copy of the equipment specific lockout procedure. If the procedure does not exist, the general lockout *(8-step procedure)* shall be used.

**ii.** The Lilly Work Area Contact, local HSE Department Representative or approved Contract Firm Personnel using the procedure as a guide, will obtain and place a lockset. The key to the lockset will then be placed in a Lilly lock box.

**iii.** Lilly Personnel or designated Contract Firm Personnel will physically verify the integrity of the lockout with each Contract Firm Personnel working on the equipment.

**iv.** Following verification, all Contract Firm Personnel will place their personal safety locks on the outside of the lock-box.

**v.** All Contract Firm Personnel working on the equipment must be identified. Methods commonly used for this purpose include signing of a lockout placement log, a tag accompanying each lock placed or signing a tag hanging from the lockout box.

**vi.** Contact your Work Area Contact for site-specific requirements.

## 29. <u>Manlifts/Scissor Lifts</u>

**A.** Manlifts/Scissorlifts are to be operated by trained and qualified personnel.

**B.** While working in an articulating boom lift, personal fall protection shall be worn at all times and connected to the approved attachment point.

**C.** Contract Firm Personnel may use Lilly owned lifts only with permission from the Lilly Work Area Contact. *(See Section 48, Use of Lilly Equipment)*
**D.** Documentation of training to operate the specific lift shall be verified before Contract Firm Personnel operate Lilly owned equipment.
**E.** Equipment shall be inspected daily and documented by the operator.
**F.** Spotters are recommended anytime the lift is in motion especially on uneven surfaces or in congested areas.

## 30. Oil and Fuel Management

**A.** SEE SECTION 42 FOR REQUIREMENTS ON SPILL PREVENTION
**B.** OIL AND FUEL INCLUDES, BUT IS NOT LIMITED TO, MATERIALS SUCH AS HYDRAULIC FLUID, LUBRICATING OIL, CUTTING OIL, FUEL OIL, DIESEL FUEL, GASOLINE AND KEROSENE.
**C.** Special written plans and training may be required for Contract Firm activity using oils and/or fuels prior to being brought on site. Contact the Lilly Work Area Contact for site-specific requirements.
**D.** All oil contaminated debris, incidental spill or leak clean up materials must be promptly cleaned up and disposed in a compatible container that is labeled and closed when not in use. Waste material shall be disposed in accordance with Section 49, Waste Disposal. All are to be managed per local policies and procedures.

## 31. Orientation

**A.** All non-Lilly personnel who will have unescorted access to Lilly sites are required to attend the Lilly contractor safety orientation training. Contractor orientation consists of four different sessions:
- Risk Level 1 Session - for all contract personnel receiving badges
- Risk Level 2 Session - for all contract personnel performing Risk Level 2 (higher risk) work.
  Note: Process Safety Management is part of the Risk Level 2 session.
- Hot Work Permit - for all of those performing or overseeing open flame or spark producing work
- Safe Work Permit- for those involved in the SWP process

**B.** Contractors shall attend applicable HSE orientation prior to the beginning of work. Risk Level 1 and Risk Level 2 orientation are only required once unless the contractor has been off-site for more than 1 year (6 months at the Clinton location).
**C.** Indiana State fire code requires all employees to receive an annual fire emergency preparedness training. The initial fire emergency preparedness training at Lilly is provided during the Risk Level 1 orientation. Contract Firms are responsible for ensuring their employees receive the fire emergency refresher training annually. Contact your local Contractor HSE Advisor for methods of receiving the annual fire emergency training.
**D.** Process Safety Management (PSM) – training is required to be taken annually; update is offered separate from RL2 training.
**E.** Hot work permit -training is required prior to performing any hot work activity and every three years. Contractors have the option to test out of the class during the three year renewal cycle. Contractors with an assigned Individual Training Plan

(ITP) should test out through the ITP. Contractors without ITPs can take the test in person where orientation classes are offered, prior to the start of the hot work class.

**F.** All foreign language orientations are scheduled by appointment only. It is the Contract Firm's responsibility to supply an interpreter.

## 32. Permits, Tags and Associated Policies

**A.** The following permits and tags are used when performing work at Lilly locations. Some locations may have additional permit requirements. Any questions regarding the applicability or use of these permits should be directed to your Lilly Work Area Contact or Contractor HSE Advisor. Indianapolis Sites use the GenSuite electronic permitting instance to initiate, issue, and house some permits associated with Indianapolis Health and Safety Programs. Check with your local area representative for additional training.

**B.** Bio-Safety Cabinet Work Permit

- **i.** A Bio-Safety Cabinet Work Permit shall be used whenever a bio-safety cabinet *(identified by a biohazard sticker)* requires gaseous decontamination, certification, HEPA filter changes, maintenance work or when cabinet components are being moved.
- **ii.** Contract Firm Personnel shall contact their Lilly Work Area Contact for issuance of these permits before beginning work on bio-safety cabinets.

**C.** Confined Space Entry Procedures/Permit

- **vii.** Many areas of Lilly are considered confined spaces. These include but are not limited to: elevator shafts & pits, tanks, stills, reactors, boilers, pits, silos, ventilation and exhaust ducts, some false ceilings, sewers, degreasers, vats, manholes, electrical vaults, pipelines, spaces between walls and ditches.
- **viii.** All confined space entry operations involving Contract Firms must be coordinated by the Lilly Entry Supervisor. Coordination of entry activities shall be sufficient to ensure that the hazards present in the space and the hazards that could be generated by the work activities in the space and adjacent to the space are clearly understood by all parties.
- **ix.** When both Lilly Personnel and Contract Firms are entering the same space, the use of Lilly permit/procedures will be required.
- **x.** When multiple trades or Contract Firms are involved in the same entry, a consistent set of permit/procedures meeting minimum OSHA requirements must be agreed upon and adhered to. At a minimum the Lilly CSE permit/procedure shall be used
- **xi.** For Permit Required and New Construction Confined Space, Lilly Emergency Response Team and Lilly Security shall be contacted prior to the initiation of work

**D.** New Construction Confined Space

i. On new construction, when it is determined that there is no potential of Lilly's operations creating an additional hazard, Contract Firms may choose to use their own procedures/permit in order to conform with Lilly SOP's. Contract Firms using their own procedures/permit must consult their Lilly Work Area Contact for approval before entry. NOTE: Clinton Site does not allow for contractors to monitor any confined space on their own, all entries are controlled by the ELANCO Entry Supervisor.

**E.** Permit Required Confined Space Entry Procedures

**viii.** A Lilly Confined Space Entry Permit shall be issued by an authorized Lilly Representative for Contract Firm Personnel performing confined space work, when there is the potential of Lilly's operations creating a hazard. Lilly Personnel shall fill out and issue the permit at the time of entry, with the Contract Firm entrant(s) and attendant reviewing and signing before entry.

**ix.** Lilly Personnel are required to perform initial monitoring prior to entry in addition to the initial monitoring performed by the Contract Firm. NOTE: At the Clinton Site contractors must use only ELANCO air monitors unless they have a specific company policy. If contactor owned monitors are used, ELANCO monitors must be used in conjunction.

**x.** The monitoring must include a check for oxygen level, carbon monoxide, hydrogen sulfide, and lower explosion limit % *(LEL)*, and any other atmospheric hazards/toxins that may be reasonably expected.

**xi.** The space must be monitored, and all readings documented, after all breaks, lunches and at least every 3 hours while work is ongoing.

**xii.** Contract Firms may be required to perform initial, periodic or continuous monitoring. Personal monitors may be required for all persons entering the confined space. Check with Contractor HSE Advisor or the Lilly Work Area Contact for site-specific requirements.

**xiii.** If the monitoring results are within acceptable limits, the authorized Lilly Representative will sign the permit and post it at the entry to the space.

**xiv.** While the space is occupied, an attendant must be stationed outside the space at all times. Some of the attendant's main responsibilities include:

**5)** Stay in constant communication with the entrants using visual, radio or other means.

**6)** Order immediate evacuation for any change in conditions which could reasonably impact the safety of the entrants and report the change to the authorized Lilly Representative.

**7)** Summon emergency response teams as conditions warrant.

**8)** Trained and capable of operating the mechanical retrieval device.

**xv.** At the completion of the day, the permit must be closed out and returned to the authorized Lilly Representative.

**F.** Non- Permit Required Confined Space Entry Procedure

**i.** Non-permit required confined space is a confined space that does not have the potential to contain any hazards capable of causing death or serious physical harm.

**ii.** It is required to conduct initial air monitoring prior to breaking the plane of the confined space.

**iii.** If no potential hazards exist, proceed with work.

**iv.** If hazards are present, a reevaluation of the hazards in the space is required and the space will be temporarily re-classified as a permit required confined space.

**v.** False ceilings in administrative buildings are considered non-permit confined spaces. False ceilings in buildings containing labs, production areas, or shop areas are considered non-administrative buildings.

**G.** Environmental Permit- Contractor should verify if the need for any environmental permits exist for their job by contacting their local Lilly Environmental Representative. Permits could include but are not limited to sewer lateral permits, demolition permits, wrecking, storm water and air permits.

**H.** Hot Work Permit *(See Section 22, Hot Work)*

**I.** Leak Detection and Repair (LDAR) Tags

- **i.** Leak Detection and Repair Tags are assigned to various components of processes *(e.g. tanks, valves, connectors, pumps, agitators)* to meet EPA requirements and are not to be removed without the permission of the Lilly Work Area Contact.
- **ii.** If a tag is removed by mistake, contact the Lilly Work Area Contact immediately.

**J.** Line Breaking Permit

- **i.** A Line Breaking Permit may be required whenever any service or process line is opened. Call your Lilly Work Area Contact or local Contractor HSE Advisor for site-specific requirements.
- **ii.** The Lilly Work Area Contact or designated area personnel will be responsible for issuing Line Breaking Permits.
- **iii.** If an unintended or unexpected material is discovered in a line while working, stop work, contain the material and contact your Lilly Work Area Contact prior to completing work.
- **iv.** The Contract Firm is responsible for verifying that all lines have been depressurized, drained and flushed by Lilly before the line break is made.

**K.** Lockout/Tag-out Permit. (*See Section 28, Lockout/Tag-Out - Control of Hazardous Energy*)

**L.** Powder Actuated Tool Permit

- **i.** Use of powder-actuated tools requires a Powder Actuated Tool Permit issued by the Lilly Work Area Contact.
- **ii.** Operators must be trained and certified before using a Powder Actuated Tool.
- **iii.** A Hot Work Permit is required before using Powder Actuated Tools in areas defined as “hazardous” by Lilly.

**M.** Roof Entry Permit

- **i.** A Roof Entry Permit is required for access to the roofs of operating facilities.
- **ii.** Roof Entry Permits can be obtained from your Lilly Work Area Contact. Site-specific requirements may apply.
- **iii.** Roof Entry Permits are null and void in the event of a building emergency or airborne release anywhere on site.

**N.** Safe To Operate Procedure (STOP) Tag

- **i.** A Safe to Operate Procedure Tag will be placed by Lilly, or designated Contract Firm when applicable, on all newly installed or reconditioned equipment as well as relocated pressure and power driven equipment.
- **ii.** The Safe to Operate Procedure Tag shall not be removed or tampered with by anyone but the authorized Representative who placed it on the equipment.

iii. The tag is to be signed, dated and a description of the work in progress should be listed on the tag.
iv. Installation Contract Firms can briefly operate equipment that have these tags, for installation purposes only, provided the individual who signed the tag is notified first.
v. The installation Contract Firm shall notify Lilly when the appropriate safety inspection, testing, verification and release of equipment are ready to be performed.
vi. Only Lilly is permitted to remove a Safe to Operate Procedure Tag.
vii. Contact your Lilly Work Area Contact for more information regarding STOP Tag procedures.

**O.** Scaffold Tag*.(See Section 41, Scaffolding)*

**P.** Safe Work Permit Process

i. Although procedures may be unique to a particular facility, all Lilly locations in Indiana have developed minimum requirements for communication between the Lilly and Contract Firm regarding potential HSE precautions inherent to the work to be performed and to the building and /or area in which the work is to be performed prior to commencement of work.
ii. During the Safe Work Permit *(SWP)* Process, the Lilly Work Area Contact will assist the Contract Firm's Personnel by providing information including area HSE precautions and recommended personal protective equipment to protect against Lilly hazards. PPE associated with the Contract Firms own work activities must be identified by the Contract Firm.
iii. The Contract Firm is also responsible for communicating to Lilly Personnel HSE precautions inherent to the work that they will be performing.
iv. The required SWP is available through the Lilly Work Area Contact.

## 33. Personal Protective Equipment (PPE)

**A.** Contract Firms shall furnish and require their personnel to wear PPE as required per OSHA or Lilly requirements. **All PPE shall meet applicable ANSI/NIOSH standards.**

**B.** Contract Firms shall train their personnel on PPE use. This training shall be in accordance with OSHA standards and manufacturer recommendations.

**C.** Proper clothing is required while working on Lilly sites. Shorts, tank tops, shirts that do not cover the shoulders and all loose clothing would be considered improper clothing.

**D.** Long sleeve shirts may be required for some activities, *(e.g. thermal contact)*.

**E.** Additional protection may be required when working in or around pipe chases, tanks or arbors. Contact your Lilly Work Area Contact or Contractor HSE Advisor for site-specific requirements.

**F.** Shirttails shall be tucked in when working around or near rotating machinery.

**G.** All disposable PPE must be disposed of in accordance with Section 49, Waste Disposal.

**H.** Eye Protection

i. Safety glasses with side shield protection are required in most work areas. Break areas, offices, or vehicles with enclosed cabs are exempt from this requirement. Contact your Contractor HSE Advisor or Lilly Work Area Contact for site-specific requirements.

**ii.** The use of contact lenses is prohibited in most chemical process areas. Contact your Lilly Work Area Contact or Local Contractor HSE Advisor for further specific requirements.

**iii.** Safety goggles may be required for use in areas where chemicals are used or stored. For work in laboratories, refer to local applicable Chemical Hygiene Plan, Work Area Contact, or HSE Advisor for specific requirements.

**iv.** Cover-all goggles or full-face shields shall be worn over approved safety glasses when removing or installing ceiling panels and drilling above shoulder height.

**v.** Tinted lenses *(with the exception of welding and cutting operations)* shall not be worn inside of buildings or in periods of limited visibility or darkness. Photo-sensitive lenses *(change shades)* are prohibited inside of buildings.

**vi.** Recommended that Contract Firms take into consideration the existing/current environmental conditions *(dusty, windy, debris, etc.)* in an effort to prevent eye injuries *(upgraded eyewear, etc.)*.

**I.** Face Protection

**i.** Face shields shall be worn over safety glasses during operations or equipment use including but not limited to the following:

**1)** Line breaking
**2)** Impact chisels
**3)** Friction cut off saws
**4)** Grinders
**5)** Masonry saws
**6)** Powder actuated tools
**7)** Power washing

**H.** Foot Protection

**i.** Contract Firm Personnel shall wear leather work boots or shoes that are suitable for the type of work being performed. This may include a requirement for leather boots that cover the ankles.

**ii.** All footwear shall have good tread on the soles.

**iii.** Steel toe safety boots or shoes are required for all Contract Firm Personnel working on construction projects and/or who may be exposed to the potential of an impact injury from falling or dropped materials.

**iv.** Some work areas may have additional requirements for steel toe shoes. Review this with your Contract Firm, Construction Manager or Lilly Work Area Contact prior to beginning work.

**v.** The use of canvas shoes, open toe shoes, open heel or sneakers are prohibited (for people doing non-administrative type of work), unless otherwise approved by your Lilly Work Area Contact. Please contact your local Lilly Work Area Contact or Contractor HSE Advisor for specific requirements.

**I.** Hand Protection

**i.** Operations that present a hazard to Contract Firm Personnel's hands shall require the use of gloves.

**ii.** Only gloves which protect the Contract Firm Personnel from the specific hazard identified shall be used.

**iii.** Specific operations that will require the use of gloves include, but are not limited to the following:

**1)** Demolition

2) Installation or removal of insulation
3) Material handling
4) Sheet metal work
5) Welding activities
6) Working in or around chemicals
7) Contact the Contractor HSE Advisor or your Lilly Work Area Contact for site-specific requirements.

**J.** Head Protection

i. Hard hats shall always be worn when entering a construction zone. Exception: Operating a motorized or mechanized vehicle while in an enclosed cab.
ii. Hard hats shall be worn per manufacturer's recommendation.
iii. Hard hats can be worn backward for welding work if necessary to safely and properly accomplish the task. Upon completion of the welding activity, the welding hood shall be removed and the hard hat returned to wearing per the manufacturer's recommendations.
iv. On construction projects, the Contract Firm and Contract Firm Personnel's name shall be legibly printed on the front of the hard hat.

**K.** Hearing Protection

i. Contract Firm Personnel shall use hearing protection devices that provide the proper amount of noise reduction.
ii. Certain high-level noise areas may require double hearing protection (e.g. earplugs and earmuffs). Consult your local site requirements.
iii. Examples of equipment use or areas that may require the wearing of hearing protection include: powder-actuated tools, jackhammers, saws, presses and some process and utility areas.

**L.** Respiratory Protection

i. Respiratory protection shall be worn as the hazard dictates and as required by Lilly or OSHA standards.
ii. Readily available for review by Lilly, and upon request.
iii. If a supplied air respirator is used, compliance with Section 5, Breathing Air, is required.

**M.** Protective Electrical Clothing. (*See Section 12)*

*Administrative or engineering controls must first be determined and implemented whenever feasible. When such controls are not feasible to achieve full compliance, protective equipment or any other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed in this section. Any equipment and/or technical measures used for this purpose must be approved for each particular use by a competent industrial hygienist or other technically qualified person. 1910.1000(e) Whenever respirators are used, their use shall comply with 1910.134.*

**34. Pesticide, Biocide, and Herbicide Management**

- **A.** All use of Pesticide, Biocide and Herbicide must follow label instructions per Federal Insecticide, Fungicide and Rodenticide Act or FIFRA. This includes the clean up after use and the cleanup of spills.
- **B.** Contractor must contact the local Lilly environmental representative before any on-site disposal of product, containers or clean-up materials.
  - **i.** Water from rinsing equipment, containers or spills shall be disposed of in a manner that would not cause pollution of surface water or ground water.
  - **ii.** All unintended uses *(spills, misapplications, etc.)* must be reported to security as an Environmental Event. *(See Emergency Information)* Clean up of unintended uses must be according to the label and/or chemist on staff for Contract Firm.
- **C.** Materials delivered to the site shall be covered and protected from the elements. Contents of the containers shall not be exposed. SDS/MSDS sheets shall be available. *(See Section 6 for SDS/MSDS sheet requirements.)*.
- **D.** Labels shall be available with all containers. If material is repackaged for use, label information must be available at the point of use.
- **E.** Application must be conducted by personnel licensed by the State Chemist Office.

**35. Powder Actuated and CO2 Tools**

- **A.** Powder actuated tools are not permitted on the Lilly Clinton site.
  The following pertains to Indianapolis sites:
- **B.** A Powder Actuated tool permit and Hot Work Permit must be completed prior to operating a powder actuated tool (see permits section).
- **C.** The Contract Firm is required to ensure that all personnel operating powder-actuated tools are trained, certified, and understand the use of the Powdered-Actuated Tool.
- **D.** Prior to using a powder-actuated tool overhead, the area above shall be clear of other workers or pedestrians.
- **E.** Misfired rounds need to be treated as a hazardous material. “Spent” rounds can be disposed of in metal recycling containers or in the general trash.

**F.** Collect misfired rounds in a closed container or plastic bottle, label as “Misfired Rounds”.
**G.** Call Indianapolis Facilities Maintenance Environmental Service or Waste Management to pick up container of misfired shells for proper disposal (HSE Specialist- 317-276-8298).
**H.** Contract Firm shall not remove misfired rounds from Lilly property
**I.** Empty CO2 cartridges may be disposed of in the metal recycling containers. Partially full or full CO2 cartridges must be treated as hazardous waste. For information on aerosol cans please see Section 49.

## 36. Process Safety Management

**A.** Lilly operates certain highly hazardous chemical processes at Indiana sites that are regulated by the Process Safety Management requirements of OSHA and/or the EPA and Lilly’s Globally Integrated Process Safety Management *(GIPSM)* program.
**B.** Contract Firm Personnel working on or near PSM regulated processes or in GIPSM High Risk Areas will be made aware of those processes and the associated hazards using access control procedures and the Safe Work Permit Process at the sites.
**C.** Contract Firm Personnel may be involved with additional site safety programs and procedures as they apply to these processes. Additional applicable site programs and procedures may include, but are not limited to: hazard communication, fitness for duty, additional training needs, pre-startup safety reviews, incident investigations, access control, non-routine work authorization and mechanical integrity programs. Site operations will involve Contract Firms with such programs/procedures when and if needed.
**D.** Detailed Contract Firm communication with operations is critical to ensure reduced risk of incidents when working in these areas.

## 37. Protection From Falling Objects

**i.** When Contract Firm Personnel are exposed to falling objects, the Contract Firm shall require each person to wear a hard hat and shall implement one or more of the following measures:
  **i.** Erect toe-boards, screens, or guardrail systems to prevent objects from falling from higher levels.
  **ii.** Erect a canopy structure and keep potential falling objects far enough from the edge of the higher level so that those objects would not go over the edge if they were accidentally displaced.
  **iii.** Barricade the area to which objects could fall, prohibit Contract Firm Personnel from entering the barricaded area and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.
  **iv.** Cover holes and floor openings.

## 38. Radiation

**A.** Radioactive Material or Equipment
  **i.** Some areas of Lilly (e.g. laboratories) contain radioactive materials or radiation producing devices.

ii. Contract Firm Personnel are not to handle, work with, or dispose of radioactive materials unless they have been trained as required by Lilly's license under the Nuclear Radiation Commission and are authorized by Lilly's Radiation Safety department to do so.

iii. A radiation sign containing the phrase "Caution, Radioactive Materials" is posted on doors or in areas approved for radiation use or on equipment, instruments or containers that contain radioactivity or are used with radioactive materials.

iv. Do not handle or move items labeled with any wording indicating that it is radioactive without a decontamination tag signed by radiation safety attached.

v. Confirm with Lilly Work Area Contact that any required post-removal radioactive survey is complete and that the work area has been released for work activity.

vi. All radioactive equipment needs to be registered or licensed with the state.

vii. Safe work practices per 410 IAC 5 (Radiation Safety), must be in place when operating radioactive equipment. Contractors may also request their Work Area Contact provide a copy of the Lilly Radiation Safety Manual and Lilly Global Standard HSE-STD-400 for additional information.

viii. Contractors working around radioactive materials or devices are recommended to attend the Lilly Radiation Safety Awareness class (BET ID 47919).

**B.** Industrial Radiography (IR) - A potentially highly hazardous activity for testing metal/welds in order to find defects demands additional scrutiny.

i. Before deciding to use radiography, confirm that radiography is necessary. (Note: that Lilly Engineering Specification 15117 allows for the use of ultrasound technology as a lower risk substitute approach in some instances.)

ii. Ensure that Lilly's Radiation Safety Department is contacted as soon it is determined that industrial radiography is needed.

iii. Company using the IR equipment must have a valid state license to perform work.

iv. At the time of the job, radiographers must be certified to perform their work (see below for additional references).

v. Ensure area work personnel are aware of work taking place and barriers with signage are in place at appropriate distance.

vi. Once on job site verify appropriate safety zones are properly established and marked in accordance with any appropriate governing regulations.

vii. Keep individual(s) present to monitor barriers to ensure that all personnel are clear of safety zones prior, during, and after radiography work until source is returned to the camera

viii. Radiographers verify to responsible personnel (Lilly or Lilly's Representative) that the source has been returned to camera after work has been completed

**C.** Tritium Exit Signs- These signs contain radioactive material (even when expired)

i. Contractor must contact Lilly's Radiation Safety Department for disposal of any tritium exit signs.

ii. The exit signs must not be disposed of as general refuse.

*For additional Federal regulations governing Industrial Radiography refer to the Nuclear Regulatory Commission (NRC) 10 CFR Parts 19, 20, and 34.*

**39. Refrigeration Equipment**

- **A.** The Lilly Work Area Contact must be contacted prior to maintaining, servicing, repairing or disposing of air-conditioning or refrigeration equipment.
- **B.** Lilly prohibits individuals from intentionally venting refrigerants into the atmosphere while maintaining, servicing, repairing, or disposing of air-conditioning or refrigeration equipment.
- **C.** The Contract Firm Technician's EPA Certification Card must be on file with the Lilly Work Area Contact prior to servicing refrigeration equipment.
- **D.** The Contract Firm Technician must contact the Lilly Work Area Contact prior to adding refrigerant to a system without making a repair *(commonly referred to as topping off, trim charge or seasonal adjustment)*.
- **E.** The Contract Firm must provide a full description of work performed to the Lilly Work Area contact upon completion. Strict conformance of EPA work practices and recordkeeping requirements per 40CFR Part 82 Subpart F, Recycling and Emissions Reduction, must be followed.

**40. Sand Blasting**

- **A.** Disposal of sand shall be coordinated with the Lilly Work Area Contact. Sandblasting may contain lead and must be disposed of in accordance with Section 49, Waste Disposal.
- **B.** Manual handling of material or components to be sand blasted is prohibited during blasting operations.

**41. Scaffolding**

- **A.** Scaffold Tag
  - **i.** Scaffold tags shall at minimum indicate the date, name of the competent person erecting the scaffold. Provisions shall be made for additional comments.
  - **ii.** Scaffolds shall be tagged to indicate their state of readiness for use.
    1. **1)** Red—Do Not Use
    2. **2)** Yellow—Use with specific instructions *(e.g. fall protection)*
    3. **3)** Green—Ready for Use
  - **iii.** Standard guard railing is required for all scaffolds above 6 feet and all unguarded walking/working surfaces 4 feet and above. A personal fall arrest system is required when a standard guard railing cannot be used.

*All scaffolds and their components must be capable of supporting, without failure, at least four times the maximum intended load* ***(§1910.28(a)(4))****.*

*All planking must be Scaffold Grade, as recognized by grading rules for the species of wood used. The maximum permissible span for 1 1/4-inch (3.12 centimeters) x 9-inch (22.5 centimeters) or wider plank for full thickness is 4 feet (1.2 meters), with medium loading of 50 pounds (22.5 kilograms) per square foot* ***(§1910.28(a)(9))****.*

*Scaffold planks must extend over their end supports not less than 6 inches (15 centimeters) nor more than 18 inches (45 centimeters)* ***(§1910.28(a)(13))****.*

*Scaffold planking must be overlapped a minimum of 12 inches (30 centimeters) or secured from movement* ***(§1910.28(a)(11))****.*

*Each scaffold and scaffold component shall support without failure its own weight and at least 4 times the maximum intended load applied or transmitted to it. Suspension ropes and connecting hardware must support 6 times the intended load. Scaffolds and scaffold components shall not be loaded in excess of their maximum intended loads or rated capacities, whichever is less****. 1926.451(a)(1), (a)(4), (f)(1)*** *The scaffold platform shall be planked or decked as fully as possible.* ***1926.451(b)(1)***

*The platform shall not deflect more than 1/60 of the span when loaded.* ***1926.451(f)(16)***

*The work area for each scaffold platform and walkway shall be at least 18 inches (46 centimeters) wide. When the work area must be less than 18 inches (46 centimeters) wide, guardrails and/or personal fall arrest systems shall still be used.* ***1926.451(b)(2)(ii)***
*Access must be provided when the scaffold platforms are more than 2 feet (0.6 m) above or below a point of access. Direct access is acceptable when the scaffold is not more than 14 inches (36 centimeters) horizontally and not more than 24 inches (61 centimeters) vertically from the other surfaces. Cross braces shall not be used as a means of access.* ***1926.451(e)(1) and (e)(8****)*

*A competent person shall inspect the scaffold, scaffold components, and ropes on suspended scaffolds before each work shift and after any occurrence which could affect the structural integrity and authorize prompt corrective action.* ***1926.450 (b), 451(f)(3)***

***Scaffold, Fall Arrest Systems***
*Personal fall arrest systems used on scaffolds must be attached by lanyard to a vertical lifeline, horizontal lifeline, or engineered approved scaffold structural member.* ***1926.502(d)(15) and 1926.451(g)(3)***

***Scaffold, Guardrails***
*Guardrails shall be installed along all open sides and ends of platforms before the scaffold is released for use by employees other than the erection and dismantling crews. Guardrails are not required on the front edge of a platform if the front edge of the platform is less than 14 inches (36 centimeters) from the face of the work. For plastering and lathing, the distance is 18 inches (46 centimeters) or less from the front edge. When outrigger scaffolds are attached to supported scaffolds the distance is 3 inches (8 centimeters) or less from the front edge of the outrigger.* ***1926.451(b)(3) and (g)(4)***

*The top rail for scaffolds must be 38 inches (0.97 meters) to 45 inches (1.2 meters) from the platform. Midrails are to be installed approximately halfway between the top rail and the platform surface.* ***1926.451(g)(4)(ii) and (iii)***

*Toe boards or other barriers are to be used to protect employees working below.* ***1926.451(h)***

*When screens and mesh are used for guardrails, they shall extend from the top edge of the guardrail system to the scaffold platform, and along the entire opening between the supports.* ***1926.451(g)(4)(v)***

*Cross bracing is not acceptable as an entire guardrail system but is acceptable for a top rail when the crossing point of the two braces is between 38 inches (0.9 meters) and 48 inches (1.3 meters) above the work platform and for midrails when between 20 inches (0.5 meters) and 30 inches (0.8 meters) above the work platform. The end points of the cross bracing shall be no more than 48 inches (1.3 meters) apart vertically.* ***1926.451(g)(4)(xv)***

***Scaffolds, Supported***
*Either the manufacturer's recommendation or the following placements shall be used for guys, ties, and braces: install guys, ties, and braces at the closest horizontal member to the 4:1 height and repeat vertically with the top restraint no further than the 4:1 height from the top:*

***Vertically***
*Every 20 feet (6.1 meters) or less for scaffolds less than 3 feet (0.9 meters) wide;*

*Every 26 feet (7.9 meters) or less for scaffolds more than 3 feet (0.9 meters) wide;*

***Horizontally***
*At each end; At intervals not to exceed 30 feet (9.1 meters) from one end.* ***1926.451(c)(1)(ii)***

**42. <u>Spill Prevention and Release Reporting</u>**

- **A.** Contract Firms shall report all spills or releases greater than one pint or one pound. *(See Emergency Information)*
- **B.** No chemicals of any kind shall be permitted to enter any waterway *(ditch, sewer, stream, trench, etc.)* or spill onto the ground.
- **C.** Store fuels, oil, and chemicals per applicable sections of this manual and away from sewers, surface water bodies and drains.
- **D.** All containers used to store fuels, oil, chemicals or wastes must meet the conditions set forth in the applicable section of this manual and must be in good condition, labeled, non-leaking and closed when not in use.
- **E.** Conduct and document regular inspections of all storage containers and secondary containment structures. Documented inspections for containers 55 gallons and over must be conducted weekly. Consult with Local Lilly Environmental Representative or Work Area Contact for additional information.
- **F.** All fuel storage tanks and containers shall have adequate secondary containment.
  - **i.** For containers 55 gallons or greater, Contract Firm must provide secondary containment that meets all applicable Federal, State and Local environmental regulations. Local site regulations may be more stringent. Contact your Lilly Work Area Contact or Environmental Representative for guidance.
  - **ii.** When required, secondary containment must have enough capacity to hold the contents of the largest container. If containers are stored outside, the secondary containment must have enough capacity to hold the contents of the largest container plus the 25-year, 24-hour rainfall event, or 110% of the capacity of the largest container. Alternatively,

providing a storm resistant shelter or cover to keep out rainwater can substitute rainfall capacity requirement in some cases.

**iii.** Acceptable secondary containment structures include plugging drains, curbing or containment pallets.

**G.** Contract Firms shall contact Lilly Work Area contact and local Lilly Environmental Representative for disposal of wastes generated from the cleanup of a spill or unauthorized release. Waste generated will be managed in accordance with Section 49, Waste Disposal.

**H.** Trucks, cars, forklifts, trailers or other general-purpose vehicles found onsite must not be leaking. Any leaks from vehicles awaiting maintenance must be prevented from reaching the ground or a drain.

**I.** All storage of oil, fuel or chemicals must be communicated to the Lilly Work Area Contact or Local Lilly Environmental Representative for determination of local requirements.

**J.** Ensure controls are in place to prevent run-off from storage areas to sewers.

**K.** For work in laboratories, follow the Chemical Hygiene Plan guidelines for chemical storage, chemical spill, and waste disposal. See also the Lilly Research Labs *(LRL)* waste classification tool for laboratory operations.

## 43. Storm Water Management

**A.** Contract Firms performing work such as construction that could impact storm water run-off are required to implement storm water quality controls and associated and site pollution prevention plans. Contact your supervisor to learn more about your firm's plan.

**B.** Install effective controls to prevent run-off from piles of exposed soil, waste or building materials. Visibly designate locations where concrete truck washout may occur on the site.

**C.** Do not construct straw bale barriers and silt fence in flowing streams or in swales where there is the possibility of a washout.

**D.** Secondary containment shall be maintained in good condition and not allowed to accumulate rainwater. Rainwater must be removed within 24 hours of any measurable rainfall. After it has been determined to be free of contaminants, rainwater can be disposed of to the storm water system. If the storm water is determined to be contaminated, consult your Lilly Work Area Contact before disposal.

**E.** Construction site entrances will be sited and constructed in a manner that prevents tracking of dirt or other material resulting from vehicle traffic. If tracking of dirt or other material occurs, it shall be cleaned up and disposed of properly.

**F.** Do not wash dirt or other material from roadways with water *(use a street sweeper)*.

**G.** Soil areas barren of vegetation that are greater than one acre in size, if left for more than 15 days in this state, shall be temporarily or permanently stabilized.

## 44. Static Grounding

**A.** Contract Firm Personnel shall wear body static elimination straps as required by site-specific procedures.

**B.** Signs will identify process areas that require static grounding.

**C.** All Contract Firm Personnel who are to be static grounded shall be tested as required by site-specific procedures.

**45. Temporary Buildings/ Fixed Locations**

A. Temporary buildings and fixed locations shall be kept clean, neat, and in accordance with OSHA Standards, Life Safety Codes, and other applicable standards.
B. Proper entry and exit stairs must be provided for temporary buildings and fixed locations.
C. The Contract Firm shall initially provide fire extinguishers for temporary buildings. Lilly reserves the right to stock fire extinguishers should it become prudent.
D. All temporary Contract Firm fixed locations *(e.g. job trailers, lay down areas, etc.)* shall be sited (located) with respect to known or potential hazards.
E. Temporary utilities are to be approved by site facilities management.
F. Contract firms that are assigned a fixed location are responsible to notify Lilly if the contract firm's hazards call for their fixed location to be equipped with any life safety equipment.

**46. Training and Tool Box Talks**

**A.** Construction Contract Firms are responsible for training their personnel in accordance with all Federal, State and Local HSE standards.
**B.** Lilly area specific hazards and HSE requirements are communicated to Contract Firms via contract documents and to Contract Firm supervisors by Work Area Contacts or other Lilly Personnel. Therefore, individuals from Contract Firms should refer first to local supervisors to receive this Lilly-specific information.
**C.** The training shall be documented and available upon request by Lilly or Contractor HSE Advisor.
**D.** At a minimum, each Contract Firm, doing non administrative work senior site representative's must have completed the applicable OSHA 10 hour training course for construction or general industry prior to beginning work on any Lilly site.
**E.** Non Administrative Contract Firms are responsible for conducting weekly toolbox HSE sessions with all site personnel. These talks shall be documented, and available for review by Lilly or Contractor HSE Advisor. Site or project specific requirements may apply regarding conducting toolbox talks before work begins.
**F.** Contract Firms performing work in a laboratory must first attend Chemical Hygiene Plan orientation and local safety procedures orientation.
**G.** Contract Firm Personnel who are performing fire watch responsibilities must have attended fire extinguisher training.

**47. Transporting Chemicals and Waste**

**A.** All hazardous materials must be marked, labeled, closed and shipped in accordance with the Hazardous Materials Regulations *(HMR)*
**B.** Bulk specifications and non-bulk UN specification containers shall be marked, labeled, placarded and prepared in accordance with the HMR.
**C.** Shipping papers also shall be prepared for each shipment of hazardous materials.

**D.** Contract Firm Personnel shall be trained and certified according to the HMR, and vehicles registered with the DOT for shipping hazardous materials.

**E.** No Contract Firm shall sign a Hazardous Waste Manifest without prior Lilly approval.

## 48. Use of Lilly Equipment

**A.** Use of Lilly Equipment by Contract Firms is allowed only at Lilly's discretion and only in cases where a strong business purpose exists to do so.

**B.** Before the Lilly Work Area Contact approves the use of Lilly equipment by Contract Firm Personnel, Contract Firm Supervision will work with the Lilly Work Area Contact to ensure the following:

- **i.** Documentation of Contractor personnel's training records for the specific Lilly equipment to be operated shall be reviewed and accepted by the Lilly Work Area Contact.
- **ii.** The equipment is in good working order.
- **iii.** Contract Firm Supervision and Contract Firm Personnel using the equipment understand any local or area-specific rules or procedures relative to the use of the equipment.

**C.** The Contract Firm shall be responsible for determining the proper tools/equipment to use, including inspecting the condition of the tools/equipment prior to use.

**D.** If Lilly tools/equipment are lost or damaged while in the Contract Firm Personnel's possession, the Contract Firm shall be responsible, at Lilly's option, for the replacement or repair of the tools/equipment.

## 49. Waste Disposal

**A.** General refuse such as empty containers, trash, packaging, paper, cardboard, construction debris (*clean fill, drywall, brick, concrete, wood, etc.)* shall be disposed of in dedicated dumpsters and roll-off boxes. The following wastes shall NOT be placed in the general refuse dumpster:

- **i.** Fluorescent HID mercury vapor lamps or other lighting or ballasts associated with lighting of this kind.
- **ii.** Soil or debris *(absorbents, rags, spill pads, etc.)* associated with leaks, spills or excavation of any known or unknown chemical compound.
- **iii.** Any hazardous chemical or waste.
- **iv.** Batteries, excluding alkaline.
- **v.** Aerosol cans with **any** contents remaining (completely empty aerosol cans are approved for general refuse).

**B.** Only scrap metal shall be disposed of in dedicated scrap metal containers. Scrap metal must be free of adhering hazardous material waste residue. If the scrap metal container has a lid/cover, it must remain covered/closed except for when scrap is being added to the container. The following materials are NOT acceptable scrap metal items:

- **i.** Batteries of any kind.
- **ii.** Unclean machinery or any item that contains oil and/or grease.
- **iii.** Pressurized cylinders *(propane, aerosol cans, etc.)*, closed tanks, closed drums, closed buckets and/or closed cans.
- **iv.** Filters of any kind *(transmission, oil, air, etc.)* that are not drained.

**v.** Materials that contain asbestos, lead paint and/or radiation.
**vi.** Empty aerosol cans.

**C.** All containers used to collect/store waste need to be labeled with contents, and closed when not in use *(e.g., General Trash, Spill Cleanup, etc.).*

**D.** Wastes generated at the site must be managed and disposed of in accordance with applicable Federal, State and local regulations as well as local Lilly policies and procedures. Contact the Lilly Work Area Contact and Local Lilly Environmental Representative for assistance.

**E.** Wastes must be disposed of at Lilly approved facilities only.

**50. <u>Welding and Cutting Operations</u>**

**A.** More information regarding Hot Work and Permitting Procedures can be found in Section 22, Hot Work

**B.** Cylinders shall be located so that sparks, hot slag or flame will not reach them, or fire resistant shields shall be provided.

**C.** Contract Firm activities or the surrounding environment has the potential to generate gases that would collect in a trench or pit. Contract Firms must account for this possibility.

**D.** Welders shall not be grounded on pipelines containing flammable gases or liquids or conduit containing electrical current. In addition, welders shall not be grounded to fences due to possible damage to security systems or electrical equipment.

**E.** A fire extinguisher *(minimum 20 lb. with ABC fire rating)* and a fire watch shall be stationed near cutting or welding operations except when performed in open shop areas.

**F.** A Hot Work Permit *(HWP)* is required for any welding, cutting or other work which could produce a fire ignition source. The Contract Firm is responsible for contacting the Lilly Work Area Contact for all Hot Work Permits.

**G.** Welding rod storage shall be handled as follows:

**i.** Welding rod boxes will not sit on shelves in storerooms where they could be opened by persons not wearing gloves and otherwise expose them to the box.

**ii.** The welding rod boxes may not be used for any other purpose *(e.g., stub-bucket, trash container, etc.).*

**iii.** Welding rod boxes *(Including those with duct tape protecting the sharp edges)* shall not be allowed in the field for any use.

**iv.** A single person will be designated by the Contract Firm Supervisor to receive, handle and destroy welding rod boxes *(e.g., shop supervisor, tool room attendant, etc.).*

**v.** Kevlar or heavy leather gloves which are free from deterioration **<u>must</u>** be worn when handling a welding rod box.

**vi.** Welding rod boxes shall be opened immediately upon receipt by the designated person and the lid *("peanut can style" or "sardine can style")* safely disposed of.

**vii.** Rods removed from the box will be placed in a container that is free from sharp edges and meets all quality control standards for metal boxes. *(Example: Grainger Safe Tube, Model 5JC13, or Phoenix model 1205441).* The empty metal welding rod box will then be immediately:

**1)** Crushed by foot or hammer.

**2)** Disposed of in a safe manner.

*Arc welding cables with damaged insulation or exposed, bare conductors must be replaced* ***(§1910.254(d)(9)(iii))***.

*For special considerations when welding operations require fluxes, coverings, coatings, or alloys involving fluorine compounds, zinc, lead, beryllium, cadmium, or mercury, employers should refer to* ***§§1910.252(c)(5) through (12)***.

*Mechanical ventilation must be provided when welding or cutting is performed either:*

- *In a space of less than 10,000 cubic feet (284 cubic meters) per welder* ***(§1910.252(c)(2)(i)(A))***;
- *In a room having a ceiling height of less than 16 feet (5 m)* ***(§1910.252(c)(2)(i)(B))***; *or*
- *In confined spaces or where the welding space contains partitions, balconies, or other structural barriers to the extent that they significantly obstruct cross ventilation* ***(§1910.252(c)(2)(i)(C))***.

*There shall be no repairs or splices within 10 feet (3 meters) of the electrode holder, except where splices are insulated equal to the insulation of the cable. Defective cable shall be repaired or replaced.* ***1926.351(b)(1) through (2) and (4)***

*Fuel gas and oxygen hose shall be easily distinguishable and shall not be interchangeable. Hoses shall be inspected at the beginning of each shift and shall be repaired or replaced if defective.* ***1926.350(f)(1) and (3)***

*General mechanical ventilation, local exhaust ventilation, air line respirators, and other protection shall be provided, as required, when welding, cutting or heating:*
*-Zinc, lead, cadmium, chromium, mercury, or materials bearing, based, or coated with beryllium in enclosed spaces -Stainless steel with inert-gas equipment -In confined spaces, and where an unusual condition can cause an unsafe accumulation of contaminants.* ***1926.353(b)(1), (c)(1)(i) through (iv), (c)(2)(i) through (iv), (d)(1) (iv), and (e)(1)***

*Proper eye protective equipment to prevent exposure of personnel shall be provided.* ***1926.353(e)(2)***

# Glossary

**Business Area Health, Safety & Environmental –** The Lilly Personnel in a Business Area dedicated to HSE aspect management. There will often be a person on the Business Area HSE staff who is the Subject Matter Expert (SME) for Contractor HSE. The support that Lilly HSE personnel provide to Contract Firms would be relative to Lilly-specific information only.

**Contractor HSE Advisor *(formerly BU Contractor HSE Representative & SMG BU Representative)* –** A HSE advisor who assists in executing the Contractor HSE Management Program (CHSEMP). A Contractor HSE Advisor must display competencies to make HSE judgments relative to: regulatory requirements, Lilly HSE Standards and local practices/procedures, best practices, and must be familiar with HSE resources at Lilly. The Contractor HSE Advisor may be a Lilly person or a person contracted to Lilly.

**Fixed Location** - Any area on Lilly property designated for Contract Firms to store materials or to perform work on a continual basis (i.e. shops, lay down areas, conex boxes, break rooms, office areas, storage closets, etc.). Temporary Contract Firm locations for short term projects are not considered fixed locations

**Hazardous Material-** Any substance or material could adversely affect the safety of the public, handlers or carriers during transportation.

**Lilly Work Area Contact(s) –** The person responsible for the oversight of the services provided by the Contract Firm and its personnel on Lilly properties/sites/projects. This may be the same person as the Responsible Host or a person working in partnership with the Responsible Host *(ex. Lilly Coordinator, Building Coordinator, Maintenance Technician, etc.).*

**Local Lilly Environmental Representative –** The Lilly Personnel in a Business Area dedicated to Environmental aspect management and primary support for Lilly Employees.

**Responsible Host *(formerly Contract Holder/Engineer/Coordinator)* -** The individual who has primary accountability for the HSE performance of Contract Firms under a specific Contract.

## Safety Classifications *(Definitions in order of seriousness)*:

A. **Unsafe Act:** An event in which Contract Firm Personnel are observed participating in a task which is considered unsafe due to Lilly policies and procedures, OSHA regulations or common sense. (Example: Breaking a safety rule.)
B. **Unsafe Condition:** An observed condition that could result in an incident involving bodily injury or property damage. (Example: Standing water on the floor causing a slip hazard.)

C. **Facility Disruption:** Event with the potential to adversely impact a facility, its equipment or processes or the strength, purity or quality of the final product.
D. **Event with Follow-Up:** An event involving an unsafe condition and/or unsafe act which is severe enough to warrant an investigation and follow-up to ensure that corrective measures have been put into place.
E. **Near Miss:** An event that could have (but did not) result in personal injury, property or equipment damage or environmental harm. Had the timing, orientation, or location of the event been different, serious damage to human health, property, equipment or the environment could have resulted.
F. **First Aid:** An event involving a minor injury requiring first aid treatment as defined by OSHA record keeping standards.
G. **OSHA Recordable:** A work related event that must be recorded on an OSHA 300 log because it resulted in death, medical treatment beyond first aid, restricted work or motion, lost time or met other general recording criteria in the OSHA regulations.
H. **Lost Time Incident:** An OSHA Recordable injury or illness that result in an injured employee missing one or more than one full work shift/day after the initial injury per doctor's orders.
I. **Fatality:** Any work related event that resulted in death.
    i. The level of investigation is determined by the classification and severity of the act, condition or event.

**Environmental Incident Classifications *(Definitions in order of seriousness)*:**

A. **Environmental Observation:** A situation that if allowed to continue could enable a violation of agency regulations or harm to the environment. Examples, but are not limited to: evidence of continual contained spills, containers with fading or torn labels, containers that are deteriorating but not currently leaking, etc.
B. **Environmental Event:** A non-routine event that could require an agency notification is a potential violation of agency regulations or potentially could harm the environment. Examples include, but are not limited to: uncontained spills to land or waterways, unplanned releases to the air (e.g. refrigerant release), failure to follow environmental protection procedures or plans, discovery of an unknown container, etc.
C. **Serious Environmental Event:** An event that has an elevated potential or actual agency regulatory enforcement action and/or originates on Lilly property but potentially impacts facilities or people off site of Lilly property and/or has potential to cause substantial damage to the environment. Examples include but are not limited to:
    i. Events that required notification to external agency, result in public complaint or are reported by the media.
    ii. Performing construction, operation, or maintenance activities, without a required notification(s), certification(s) and/or agency permit(s).
    iii. Substantial uncontained spills.

# Acronyms

| | |
|---|---|
| ACM | Asbestos Containing Material |
| ANSI | American National Standards Institute |
| API | Active Pharmaceutical Ingredients |
| BBP | Bloodborne Pathogens |
| BR&D | BioProcess Research and Development |
| CCO | Certified Crane Operator |
| CGA | Compressed Gas Association |
| CL | Clinton Laboratories (Clinton, IN) |
| CHSEMT | Contractor Health, Safety, & Environmental Management Team |
| CSE | Confined Space Entry |
| CHSEMP | Contractor Health, Safety, & Environmental Management Process |
| DOT | Department of Transportation |
| EPA | Environmental Protection Agency |
| EMR | Experience Modification Rating |
| ERT | Emergency Response Team |
| FDA | U.S. Food and Drug Administration |
| FM | Facilities Management |
| GFCI | Ground Fault Circuit Interrupter |
| GFD | Global Facilities Delivery |
| HBV | Hepatitis B Virus |
| HEPA | High Efficiency Particulate Air (filtration) |
| HIV | Human Immunodeficiency Virus |
| HMR | Hazardous Materials Regulations |
| HSE | Health, Safety and Environmental |
| HWP | Hot Work Permit |
| IDLH | Immediately Dangerous to Life and Health |
| LCC | Lilly Corporate Center (Indianapolis, IN) |
| LDAR | Leak Detection and Repair |
| LEL | Lower Explosive Limit |
| LPG | Liquefied Petroleum Gas |
| LTC | Lilly Technology Center (Indianapolis, IN) |
| LOTO | Lockout/Tag-out |
| MICCS | Metro Indianapolis Coalition for Construction Safety |
| MRO | Medical Review Officer |

| | |
|---|---|
| MSDS/SDS | Material Safety Data Sheet/ Safety Data Sheet |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute for Occupational Safety Health |
| NRR | Noise Reduction Rating |
| OCIP | Owner Controlled Insurance Program |
| OSHA | Occupational Safety and Health Administration (Department of Labor) |
| PE | Professional Engineer |
| PHM | Particularly Hazardous Material |
| PPE | Personal Protective Equipment |
| PSI | Pounds per Square Inch |
| PSM | Process Safety Management |
| SAC | Site Asbestos/Lead Coordinator |
| SAMSHA | Substance Abuse and Mental Health Service Administration |
| SIF | Serious Injury and Fatality |
| SWP | Safe Work Permit |